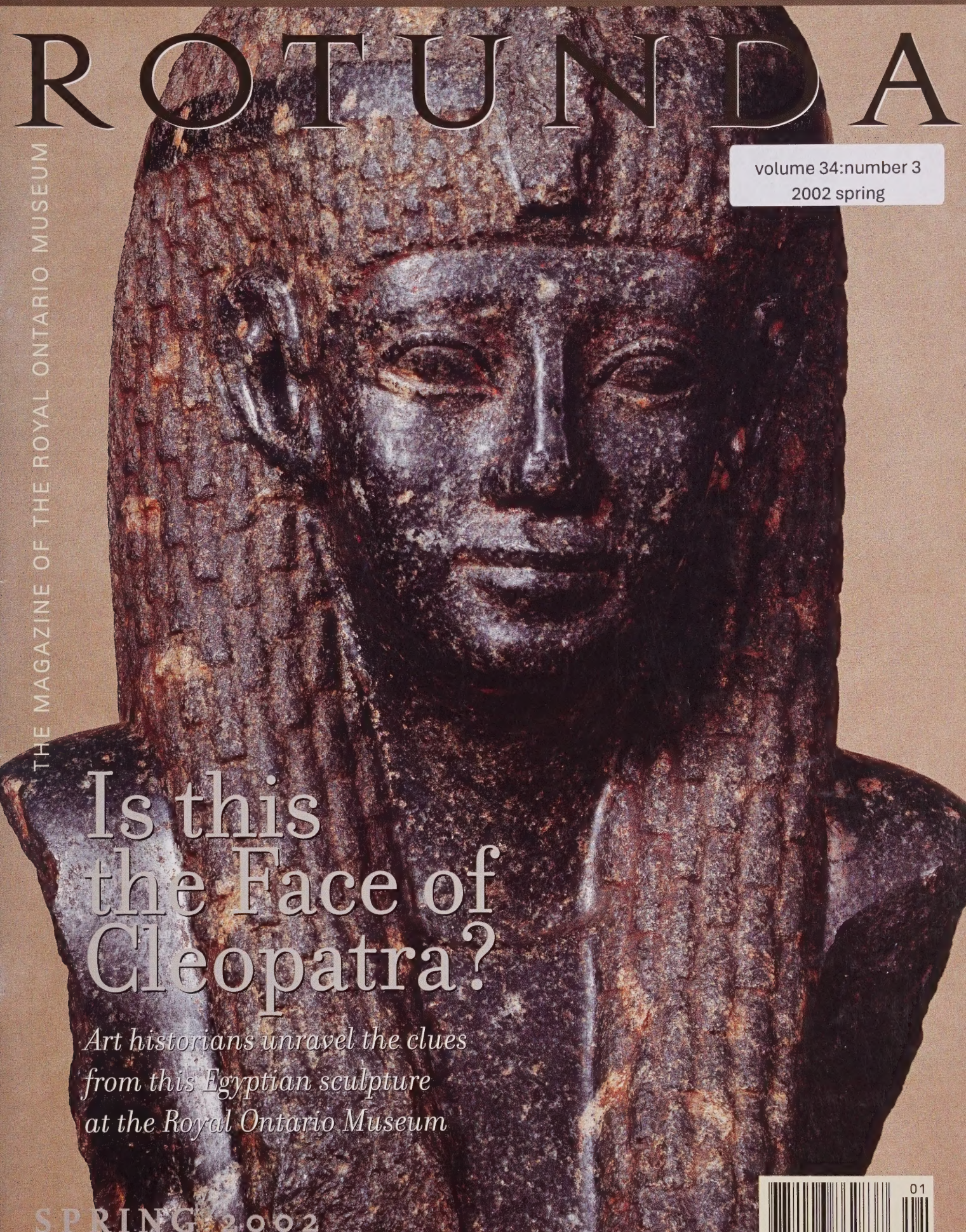
MEMORIES OF AFGHANISTAN | THE BATS OF VIETNAM

ROTUNDA

THE MAGAZINE OF THE ROYAL ONTARIO MUSEUM

volume 34:number 3
2002 spring



Is this the Face of Cleopatra?

Art historians unravel the clues from this Egyptian sculpture at the Royal Ontario Museum

SPRING 2002

DISTRIBUTED BY CMPA $4.25

01

7 72006 86283 7

Jean Paul Riopelle, *Abstract Composition*, 1951, 18" x 13" oil on canvas, private collection, Calgary

Masters Gallery ltd.

Specializing in Top Quality Canadian Art

Masters Gallery Ltd. 815c 17th Avenue SW Calgary, AB T2T 0A1 (403) 245-2064 mastersgalleryltd.com

CONTENTS

Volume 34, Number 3, Spring 2002

FEATURES

12 **For the Birds**
How an extraordinary partnership between a painter and a poet led to the creation of a singular group of bird paintings.
By Joan Winearls

18 **The Bats of Vietnam**
For our roving biologist, on-site research into Vietnamese bats proved rewarding. But equally rich rewards came from unexpected quarters.
By Judith Eger

24 **Remembering Afghanistan**
As a student, our writer visited the exotic lands she had known only through books and slides. Thirty-five years later, she recalls the archaeological treasures she explored in a land not yet ruined by tragedy.
By Lisa Golombek

32 **Cleopatra of Toronto**
Curators are on the brink of an intriguing discovery about an uninscribed statue in the ROM's Egyptian gallery.
By Roberta L. Shaw and Sally-Ann Ashton

DEPARTMENTS

4 Explorations
Textile forgeries; teenage tyrannosaur; a warning for Chinese widows.

7 Growing Collections
More than money grew on trees in ancient China. By Klaas Ruitenbeek

9 Backyard Biodiversity
Can we save the redside dace minnow? By Erling Holm

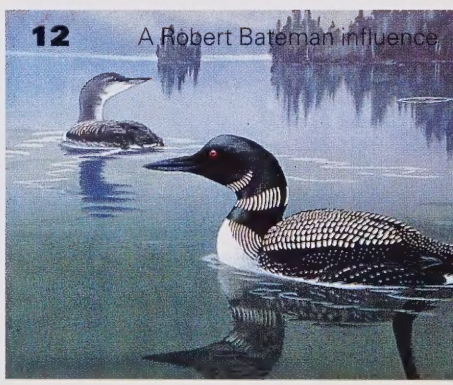
41 PaleoScene
Trace fossils and the fleeting aspects of ancient life. By David Rudkin

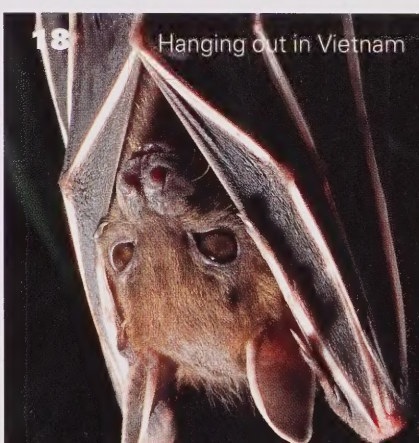
43 Libris
Book reviews: Atlantis, Astronomy, Aromatherapy. By Glen Ellis

45 Conservation Notes
Seeing beyond the ordinary with invisible light. By Marianne Webb

47 ROM Answers
A Scottish piggin and other treen. By Peter Kaellgren

52 From the Archives
Pioneering geologist Madeleine Fritz. By Julia Matthews





COVER IMAGE: BRIAN BOYLE. EGYPTIAN SCULPTURE FROM THE ROM'S COLLECTIONS IDENTIFIED AS EARLY PTOLEMAIC QUEEN OR GODDESS.

THE ROM

PATRONS

The Right Honourable Adrienne Clarkson, C.C. C.M.M. C.D.
Governor General of Canada
The Honourable Hilary M. Weston
Lieutenant Governor of Ontario

BOARD OF TRUSTEES

Jack Cockwell, *Chair*
Harriet E.Walker, *Co-Chair*

E. M. (Yeti) Agnew, Salvatore Badali, Andrea M. Bronfman, Robert T. E. Gillespie, Martha Hogarth, Victoria Jackman, Peter Janson, Bronwyn Krog, Elsie Lo, Stephens B. Lowden, Bahadur Madhani, Alan C. Middleton, John F. Prato, Jean M. Read, Joey Tanenbaum, Richard S. Wernham.

Ex-officio
Robert Birgeneau, Wendy M. Cecil, William Thorsell.

ROM FOUNDATION BOARD OF DIRECTORS

Frank Potter, *Chairman*

Directors
Jack Cockwell, Jennifer Ivey Bannock, John F. Driscoll, Nicole Eaton, Robert Farquharson, Linda Hasenfratz, Hon. Roy MacLaren, James W. McCutcheon, Dr. Jack Mintz, Jack McOuat, Susan Murray, Robert E. Pierce, Joan Randall, Dr. Michael D. Sopko, James Temerty, William Thorsell, Donald A. Wright.

ROM FOUNDATION BOARD OF GOVERNORS

Kenneth W. Harrigan, co-chair
Elizabeth Samuel, co-chair
Arti Chandaria, Robert Brown, Helen Gardiner, Hon. Edwin A. Goodman, Ned Goodman, William B. Harris, Hon. Hal Jackman, Thomas Kierans, Allen T. Lambert, Susanne Loewen, Dixie Anne Montgomery, Bernard Ostry, Wendy Rebanks, Grant L. Reuber, John A. Rhind, William J. Saunderson, Thomas Savage, M. Joan Thompson, Lynton Wilson.

SENIOR STAFF

William Thorsell
President and Chief Executive Officer
Margaret L. Beckel
Chief Operating Officer
Michael Shoreman
Senior Vice-President, Business and Capital Development
Hans-Dieter Sues, Ph.D. (Harv.)
Vice-President, Collections and Research
David Palmer
President and Executive Director, ROM Foundation

THE ROM'S MISSION IS TO INSPIRE WONDER AND BUILD UNDERSTANDING OF HUMAN CULTURES AND THE NATURAL WORLD.

CONTRIBUTORS

Dr. Sally-Ann Ashton

Fitzwilliam Museum

SALLY-ANN ("Cleopatra of Toronto") studied classical archaeology at King's College, London, and was co-curator of the exhibition *Cleopatra of Egypt: From History to Myth*. She has curated the Ptolemaic and Roman material at the Petrie Museum of Egyptian Archaeology in London and is now an assistant keeper in the Department of Antiquities at the Fitzwilliam Museum, Cambridge, England, where she curates the Egyptian collection. She has worked on excavations in Greece, Libya, and Egypt.

Roberta Lawrie Shaw

Department of Near Eastern and Asian Civilizations

AS AN ASSISTANT curator at the ROM, Roberta ("Cleopatra of Toronto") is conducting fieldwork and has developed exhibits in Egypt. In 2000, she was assistant curator for the ROM's blockbuster show *Egyptian Art in the Age of the Pyramids* and recently she served as resource person for a ROM tour of Egypt.

Joan Winearls

Department of Museum Volunteers

JOAN ("For the Birds") is the former map librarian at the University of Toronto Library, a longtime birdwatcher, and a ROM Library and Archives volunteer. She is working on a catalogue of Allan Brooks's wildlife art.

Lisa Golombek

Department of Near Eastern and Asian Civilizations

LISA ("Memories of Afghanistan") joined the curatorial staff of the ROM in 1966, shortly after this picture was taken of her photographing an *ahu* (gazelle) in the Middle East. As a senior curator at the ROM, she specializes in Islamic art. Currently, she is researching later Persian pottery and conducting fieldwork in Kirman, Iran.

Dr. Judith Eger

Centre for Biodiversity and Conservation Biology

JUDITH ("The Bats of Vietnam") is a senior curator of mammalogy and was responsible for developing the popular Bat Cave display at the ROM. She has conducted four field trips to Vietnam and currently is studying collections of Vietnamese bats for a publication on the bats of Vietnam.

PRESIDENT'S MESSAGE

THERE IS AN apparent paradox in the approach to museum exhibit and gallery design these days. On one hand, many museums and exhibit-design specialists say that if we are to engage the current generation of museum goers, much more emphasis should be placed on interactive displays and environmental experiences. On the other hand, the highest attendance still occurs at museums and galleries with more traditional, restrained approaches to exhibitions and displays. How can we make sense of these competing approaches to content?

More than 5 million people visited the new Tate Modern art gallery in London in the 18 months after its opening in May 2000. The revamped Tate Britain art gallery just up the Thames has also been busy since its reopening last October. Similarly, London's National Portrait Gallery continues to see significant increases in attendance following its expansion and modernization through the Christopher Ondaatje wing.

None of these galleries breaks the bounds of traditional museum display in any significant way. Some offer new technological aids to explore their collections—the National Portrait Gallery's "IT Gallery," for example, provides computer terminals located in a separate mezzanine to review digital images of the collection. But none of them makes any overt bow to the notion that their collections or visitors require much assistance from interactive devices, technological enhancements, or "experience capsule" design, which immerses the visitor in theatrical spaces representing exotic worlds.

This holds true as well for the grandly renovated Louvre and the recently refreshed Beaubourg in Paris, the Metropolitan Museum of Art in New York and, indeed, the new Guggenheim Museum in Bilbao, Spain. All are conspicuous for their resistance to the view that interactivity, technical aids, and dramatic environmental design are required to attract audiences—and all are conspicuous for high attendance, too.

Is it because each of these museums features excellent art rather than science or natural history? Does art speak for itself, while science requires the whole panoply of contextual aids now so prevalent in museum design?

Earthernware horses, AD 695–725, in the ROM's T. T. Tsui Galleries.

BRIAN BOYLE, ROM

Art does speak for itself to a good degree, creating a personal relationship between object and viewer. Nevertheless, much is lost in the appreciation of great art if the viewer has little knowledge of its context—the intention of its creator and the place of the piece in the context of its time. So the best art museums are investing much more these days in detailed captions and background panels, personal audio guides that give extensive context to the art in question, and supporting "IT galleries and catalogues that serve as authoritative guides to permanent exhibits."

You can see this in everything from the Louvre's new gallery of indigenous art to Tate Britain's expanded commitment to wall text and captions in its survey of British art since 1500. Much more context is available, but it is discreetly available: it is context by choice, rather than context through the imposition of overweening and intrusive aids and environmental design. A happy balance is struck between the centrality of the object and access to contextual information about it.

Compare this to the tendency in many natural history museums and specialist art museums to swamp the artifacts, specimens, and art with audio-visual and environmental "aids." The visitor enters a faux world of light, dark, screens, animations, buttons, levers, ramps, soundscapes, and textures that turn context into the very subject of the gallery. Whatever specimens or objects displayed in the galleries assume a supporting role for context—the obverse of the leading art museums.

Museums that lack high-quality collections tend to rely on such overbearing aids to satisfy their visitors. The same goes for museums with good collections that have lost faith, either in the power of those collections themselves, or in the capacity of their visitors to appreciate good collections with unobtrusive contextual assistance.

The ROM has excellent collections in both natural history and human civilizations. We retain enormous faith in the power of these collections and in the capacity of our visitors to be engaged by them. Our new gallery designs will give ROM collections clear pride of place, while providing potent but proportionate supporting information, with volume and variety in beautiful surroundings. That's just who we are.

BRIAN BOYLE, ROM: 934.4.524, 934.4.514B

Old Ford Forgery

Did Oberkampf Swipe the Idea?

In 18th-century Europe, the fledgling printed-textile business was fiercely competitive. With no copyright laws in place in England before 1787, there was widespread pirating of textile designs. Journals of the House of Commons record complaints by upscale printed-cotton manufacturers whose elaborate, newly introduced patterns were routinely copied within a fortnight on "Coarser Cloth and in bad Colours" that did not wash well and sold for a fraction of the original's price. The profit potential eroded even further as other premium companies soon afterwards brought out their own versions of the most popular patterns.

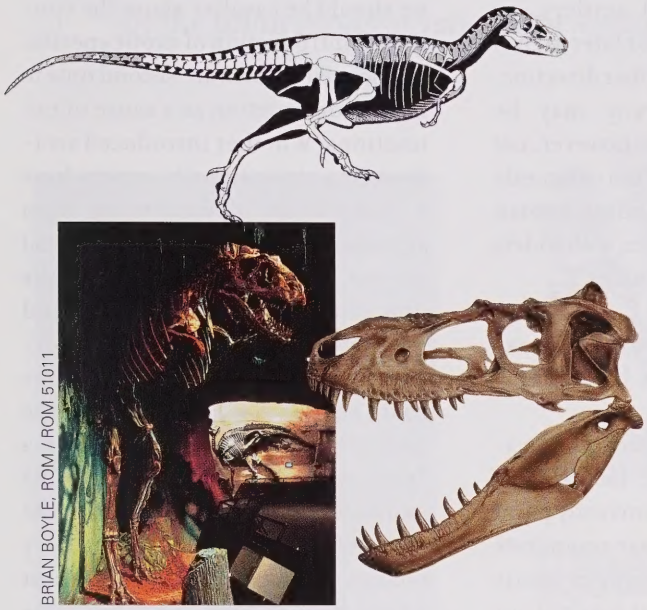
An excellent illustration of the problem can be seen by comparing two ROM artifacts that appear, at first glance, to be identical. One of them, the original design (above, left) is the earliest known copperplate printed textile to display an identifying signature and date. Designed by Robert Jones, it was produced in 1761 by the Old Ford Factory in Middlesex, England. The other artifact, thought to be a copy made in France somewhat later, lacks these designations. Recently, I discovered at the Metropolitan Museum of Art in New York yet a third, undocumented, version with the date and manufacturer's name presumably forged.

I have started to suspect that letters written during the 1770s by a man who was to become the world's most famous manufacturer of printed textiles, Christophe-Philippe Oberkampf, might shed light on the Old Ford copies. Early on in the establishment of the industry in France, about 1760–1780, when British products still reigned supreme, Oberkampf made frequent reconnaissance trips from France to textile manufacturers in England. An artifact stamped with his factory mark documents that Oberkampf produced a very close version of a Chinoiserie textile that had originated with Nixon & Co. in Surrey.

Then, in 1774, Oberkampf managed to persuade one of the top designers at Britain's Old Ford firm—a Swiss artist named Peter Lemeunié—to join his business in France. It is entirely conceivable that several of Old Ford's designs may have been recreated there after Lemeunié arrived.

Eventually, the best British producers could not afford to stay in business and the overall quality of British prints seemed to decline in direct proportion to France's gained prominence. Within a decade of his factory's opening, Oberkampf was producing printed cottons that easily rivalled those of the English, and magnificent expensive prints like the one Jones created for Old Ford were never again equalled in Britain.

—Starr Siegele



BRIAN BOYLE, ROM / ROM 51011

DINOSAUR GRAPHICS: ©DINO PULERÀ AND THOMAS CARR

Baby Face

ROM Albertosaurus *reveals new findings on dinosaur development*

FOR MANY Late Cretaceous dinosaurs living 97.5 to 65 million years ago, the face of death belonged to tyrannosaurids. Though *T. rex* was the largest and last of the North American species, some 75 million years ago in what is now Alberta, *Albertosaurus libratus* was a top predator. The ROM boasts one of the finest skeletons of this dinosaur. Collected in 1933 on a ROM expedition led by Levi Sternberg, the ROM specimen has an almost complete skull and skeleton. The skull is also exceptional for its completely disarticulated state—all bones are separated from one another—which allows each bone to be fully studied. These qualities made the ROM's *Albertosaurus* the prime reference for my recent study of growth changes in tyrannosaurid skulls. All juvenile tyrannosaurids had sleek skulls, making it difficult to assign them to a particular species. Adults were impressive: they had deep jaws, facial bones swollen by air sacs, and full development of species-specific characteristics. Skeletal evidence indicates that the ROM's *Albertosaurus* was a "teenager" when it died—it had some species-specific features, yet it retained the flat facial bones that give it a "youthful" appearance. Almost 70 years after its discovery, the ROM's *Albertosaurus* continues to illuminate the world of tyrannosaurids and their evolution.

—Thomas Carr

BRIAN BOYLE, ROM

Fanning a Grave

Harsh Tales Fed Ancient China's Social System

THE PATRIARCHAL SOCIAL SYSTEM in pre-modern China encouraged men to remarry and to take concubines, but disapproved of a woman's marrying more than one man, even if her husband died. Widows were expected to lead a celibate life. Lauded if they went on caring for parents-in-law and bringing up children single-handedly, widows were even more highly praised if they chose to commit suicide—considered the ultimate evidence of loyalty to a spouse. Chinese author Feng Menglong (1574–1646) in a book of stories called *Jingshi tongyan* (Admonitory Stories, 1624) tells an apochryphal tale on this theme about a renowned Daoist philosopher named Zhuangzi.One day Zhuangzi chanced upon a young widow fanning her husband's new grave. Curious, he later found out that she wanted to make the earth harden quicker. Her husband had given her permission to remarry, but only after the earth on his grave was hard. Zhuangzi decided to test his own wife's fidelity, and feigned death. At first his wife was heartbroken. Yet, after seven days, when a handsome young man appeared to pay his respects to the deceased, she fell for him instantly and schemed to marry him. Zhuangzi came out of the coffin and the young man, a mere illusion, disappeared. The wife, full of shame and utterly devastated, took her life by strangling herself with her own embroidered sash.

—Ka Bo Tsang

WRITE TO: *ROTUNDA*, 100 QUEEN'S PARK, TORONTO, ONTARIO M5S 2C6.
THE EDITORS RESERVE THE RIGHT TO EDIT FOR LENGTH AND CLARITY

Mixing with the Locals

YOUR TOPICAL Winter 2001 column "Backyard Biodiversity" called "Alien Invaders in the News," actually treats several more exotic organisms than those its authors acknowledge. Recent invasions of soybean aphids (*Aphis glycines*) and their predators, the multicoloured Asian lady beetle (*Harmonia axyridis*), afflict no pristine New World ecosystem, but an equally exotic field crop, the soybean (*Glycine max*).

This East Asian native and domesticate was introduced to Europe during the 1700s and later brought to the Americas by farmers of European origin, who tried to sow it in soil from which they had eradicated other plants. Likewise, the aphid's alternate host, buckthorn (*Rhamnus* species), is a Eurasian shrub which long ago hitched a ride across the Atlantic with European agricultural settlers, so preparing the habitat for later arrival of the aphids from the other direction.

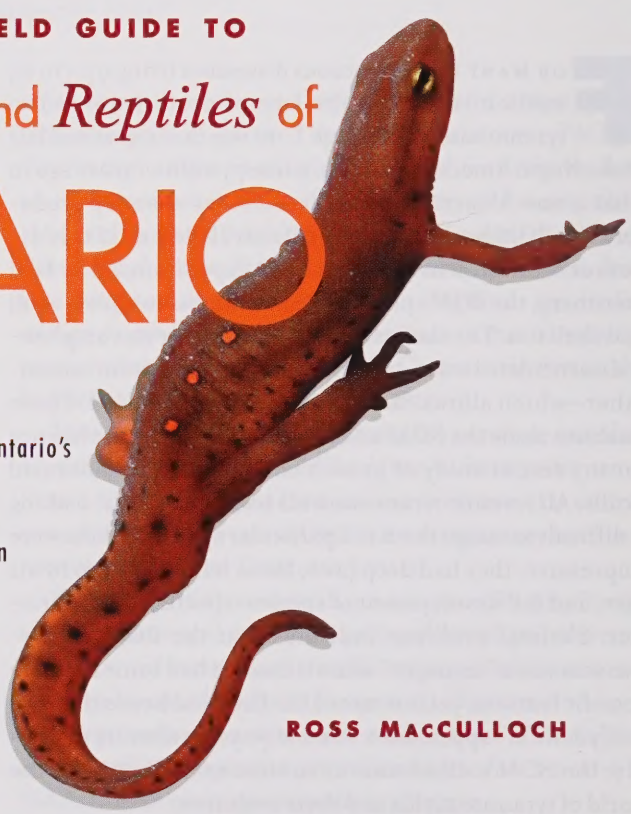
Ontario's biodiversity may be unique. That diversity is, however, not simply native or natural but complexly connected to long-standing human interventions undertaken with widely varying awareness and intent.

RICHARD C. HOFFMAN
PROFESSOR OF HISTORY
YORK UNIVERSITY

Chris Darling, PhD, curator and associate professor of Zoology, University of Toronto, replies: As you correctly point out, most communities in temperate North America now harbour exotic species. But the fact that many of our agricultural systems are based on introduced species does not mean that we should be cavalier about the continued introduction of exotic species. Introduced species are second only to habitat destruction as a cause of extinctions. Whether introduced accidentally or intentionally, exotics have a nasty habit of dispersing from agroecosystems and impacting local species. *Coccinella novemnotata*, is now on the brink of extirpation and the introduction and population explosion of yet another competitor could be the final blow. Whether the loss of this species would affect a "pristine New World ecosystem" is moot. There are very few pristine ecosystems in the world and arguably none in southern Ontario—so the best we can do is to keep our ecosystems from becoming any less pristine.

NEW FROM THE ROM

THE ROM FIELD GUIDE TO
Amphibians and Reptiles of
ONTARIO



- Includes all species observed in Ontario
- Written in clear, accessible language
- More than 150 full-colour photographs from many of Ontario's most celebrated nature photographers
- Colour maps and keys to orders and families
- Formatted for quick and accurate species identification
- Fits in a backpack or pocket, with stitched binding for extra strength

$24.99 Available in April at the ROM and at bookstores everywhere

ROSS MACCULLOCH

ROM www.rom.on.ca
M&S McClelland & Stewart • *The Canadian Publishers* • www.mcclelland.com

Images of Paradise

In the tomb goods of 1st- to 3rd-century Sichuan, more than money grew on trees.

BRIAN BOYLE, ROM

NR237

NR227

Centre: Money tree from China, ca. 200 AD. Height: 162 cm (5 feet, 2 inches). Gift of Joey and Toby Tanenbaum.
Right: The Queen Mother of the West is shown on this top piece of the same money tree. Height: 15 cm (5.8 inches).
Left: Buddha as a decoration on another money tree, also from China ca. 200 AD. Height: 5.2 cm (2 inches). Gift of Joey and Toby Tanenbaum.

KLAAS RUITENBEEK

Found in tombs of south-western China during the Eastern Han dynasty, from AD 25 to 220, money trees are bronze representations of trees on a ceramic base with coins hung on their branches. Typically about 1.5 to 1.8 metres (five to six feet) tall, the vast majority were found in one province, Sichuan. Though money trees are extremely rare, the ROM is fortunate to have four: one acquired in 1994, and three donated a year ago as part of Joey and Toby Tanenbaum's larger gift of artifacts to the Museum.

Money trees were intended to provide a tomb's occupant with an endless supply of coins. The type of coin used, round with a square hole in the middle, was first made during the Han Dynasty (206 BC to AD 220) and remained in use until the Chinese empire ended in 1912. There are many other decorations on a money tree, apart from the coins, all of them related to paradise. These reveal much about the religious ideas current in Sichuan at the time.

The deity who ruled over paradise,

The Restaurants of the ROM

DRUXY'S famous
DELI SANDWICHES SINCE 1976

Druxy's Famous Deli serves delicious soups, healthy salads and hearty made-to-order sandwiches.
The informal deli atmosphere, individualized meal preparation and 300 seat capacity make Druxy's a great spot for a quick snack, leisurely lunch or coffee break. Druxy's is located on the Museum's first floor, just inside the front entrance and next to the ROM Gift Shops.

Druxy's also offers special menus for schools and adult groups and catering for casual events.

For more information
call the OFFICE OF SPECIAL EVENTS
AND GROUP SERVICES at the ROM.
Tel: (416) 586-5572
Fax: (416) 586-5792
Web: www.rom.on.ca

for example, was the Queen Mother of the West; her image is found at the top of most money trees. Her realm was on the magic mountain, Kunlun, where she lived amid wild animals and immortals, sitting on a throne flanked by a dragon and a tiger. She had access to the herb of immortality, which was pounded in a mortar by a hare. A fox with nine tails was her steady companion. Decoration on the branches of the ROM's money trees depicts the animals and immortals of the Western Paradise on Mount Kunlun. We see the Queen Mother on her dragon and tiger throne as well as toads, birds, monkeys, horses, and all manner of hybrid beings sitting or climbing between the coins and paradise flowers.

Often, money-tree depictions of the Queen Mother show her with a shining jewel on the forehead. Many scholars think this derives from Buddhism, reflecting the *urna*, or round jewel between the eyebrows, which is one of the Buddha's distinctive features. In the first century AD, Buddhism was brought to China from India, and accordingly some of the earliest representations of the Buddha are found in Sichuan. One of the ROM's money trees contains the most beautiful early Buddhas: there are five of them, crisply cast on the stem, the right hand shown making the gesture of consolation, and the left hand holding a fold of the garment.

Stylistically, they are clearly related to the Buddhist art of Gandhara in present-day Pakistan and Afghanistan, which also dates from the first centuries AD. By the second century, very few Buddhist scriptures had been translated into Chinese. The Buddha was still considered just another immortal or sage, and was integrated into the paradise of the Queen Mother of the West; coming from the west, he fitted there nicely. Not until the 3rd century did the full extent of Buddhism become known in China and develop into China's most important religion. It is likely that the disappearance of money trees during the 3rd century is related to this religious development.

Above: Detail of money tree branch; an immortal cultivates longevity mushrooms and paradise flowers. Height: 6 cm (2.3 inches).
Below: Detail of money tree branch: a tiny horse. Height: 7 cm (2.7 inches).

The branch designs for money trees are really line drawings, cast in paper-thin bronze with thin relief lines. They are precious relics of an otherwise lost pictorial art. Although money trees as a whole are quite large, the decorative designs are so tiny that they can truly be appreciated only when one has the opportunity to disassemble the tree and scrutinize the branches individually. The scene of a little garden in which an immortal with a staff is cultivating longevity mushrooms and paradise flowers measures no more than 8 by 6 centimetres (3 by 2 inches). The images of a jumping horse and a diving bird on the same branch are even smaller.

Together, the ROM's four money trees contain more than 70 branches with dozens of different designs. They are a treasury of Han Dynasty pictorial art, preserved in miniature.

Klaas Ruitenbeek holds the Louise Hawley Stone Chair of Far Eastern Art at the Royal Ontario Museum.

Can We Save the Redside Dace?

As rapid development degrades the Greater Toronto Area's streams, creative solutions will be needed to preserve this threatened minnow that calls the city home.

W. ROSTON

ERLING HOLM

Look in most any stream in the Greater Toronto Area and you'll find a mixture of common baitfish—white sucker, blacknose dace, creek chub, and common shiner. In a few of the cooler streams, if you're lucky, you may even glimpse a pretty minnow called the redside dace. Reaching a maximum length of just 11 cm (4.3 inches) during its three- or four-year lifespan, the redside dace is easily identified by its large mouth and, in spring, by the brilliant yellow stripe and bright red sides that both males and females develop. But look soon. This fish may not be around for long.

Swimming in pools in the upper portion of a stream's water column, the redside dace searches for insects flying a few centimetres from the water's surface. When one gets close enough, the dace leaps from the water and snags the insect in its large mouth. In May, in the downstream end of a creek's pools, while the dace continues to feed, its neighbours, creek chub and common shiner, are busy excavating pits in shallow

The Restaurants of the ROM

Jamie KENNEDY at the Museum

Discover why food critics rave about chef *Jamie Kennedy's* elegant fine dining restaurant at the ROM. Experience the cuisine of one of Canada's most celebrated chefs in an atmosphere of comfortable sophistication.

Located on the fourth floor of the Museum, **JK ROM** is open daily for à la carte lunch and is available for group bookings and special events.

For more information call the OFFICE OF SPECIAL EVENTS AND GROUP SERVICES at the ROM.
Tel: (416) 586-5572
Fax: (416) 586-5792
Web: www.rom.on.ca

gravelly areas and can be seen spawning in and defending these areas. Once the water temperature reaches about 18°C, redside dace can be spotted hovering over these pits, waiting for a chance to spawn in the nests. While other species are chased away, for some reason the redside dace are tolerated by the larger and more aggressive species who are often still using these nests.

While the redside dace is most common in Pennsylvania, Ohio, and Wisconsin, Ontario supports about 10 percent of the fish's global population. This portion is concentrated in the rapidly developing Greater Toronto Area.

Recent fish surveys conducted in municipalities such as Oakville, Milton, Brampton, Vaughan, Richmond Hill, and Markham confirm that the redside dace is still present but show that populations have dwindled considerably and some have disappeared completely. Perhaps half of the 63 documented populations in Ontario are now gone.

Though reasons for the minnow's decline in the city are not clear, they likely relate to changes in habitat caused by residential and industrial development. Redside dace prefer streams that have many pools and a shoreline with a thick growth of grasses, herbs, and shrubs. Riparian, or streamside, vegetation not only stabilizes the banks, it supports the fish's flying insect prey, cools the water, and provides cover against predators.

In a natural landscape, rain soaks into the ground and water is released slowly into the stream, creating a relatively uniform flow throughout the year. But as the area covered by rooftops, driveways, and pavement increases, so does the intensity and frequency of flooding in the streams. As well, the water running off impervious surfaces often increases water temperatures dramatically and carries potentially harmful substances such as soil, salt, and oil into streams. Higher water flows erode a stream's banks, resulting in muddy water and silted substrates. The result is a wider stream with fewer pools—and poor water quality.

Muddy water makes it more difficult for the redside dace to see its prey, and silted substrates can smother the fish's eggs, reducing its reproductive success. These effects also diminish the habitat suitable for other species: many urban streams have already lost several species of fishes and invertebrates.

ROM surveys in Morrison Creek in Oakville in 1985 turned up seven fish species, including 22 specimens of redside dace. Fifteen years later, much more extensive sampling turned up only four species and just two specimens of redside dace. Only the hardy, tolerant fishes—white sucker, blacknose dace, creek chub—are able to withstand the effects of urban growth, although fewer of even these fish exist in such streams than would occur in pristine conditions.

To help prevent further decline in redside dace populations in Ontario, a multi-agency team—including representatives from the Ontario Ministry of Natural Resources, the Toronto Zoo, several conservation authorities, Ontario Streams, the federal Department of Fisheries and Oceans, and the ROM—is in the process of making recommendations. Protecting redside dace habitat in the GTA will not be easy. It may even require altering our methods of developing land, a troublesome prospect considering that, according to the Ontario Ministry of Municipal Affairs and Housing, within the next 20 years the GTA will have to make room for an estimated additional 2.5 million residents and 1.5 million new jobs.

Accommodating this increase in human population makes it almost inevitable that more land will be altered from its natural state. The challenge will be to come up with innovative ideas on how to protect the redside dace in the face of urban growth.

Erling Holm is assistant curator of fishes in the ROM's Centre for Biodiversity and Conservation Biology.

ROTUNDA

ADD TO YOUR COLLECTION

SCULPTURE AND THE VIRGIN | KOREA'S CULTURAL RICHES
ROTUNDA
The Enigmatic Hoatzin
A 200-year-old question answered
Dinosaur Ancestors
Hunting for evidence in the desert of Uzbekistan
FALL | WINTER 1999
SPECIAL BONUS: ROM NEWS INSIDE | TERRIBLE DINOCARIDS
ROTUNDA
In Vogue in Ancient Egypt
How the beautiful people kept up appearances

SUBSCRIBE NOW

Order a year of Rotunda *and you'll have the world at your fingertips. From ancient civilizations to scientific breakthroughs,* Rotunda *brings you a world of discovery. Our writers will take you with them as they solve ancient mysteries, look in depth at the wonders of nature, tackle the tough questions of conservation and ecology, and examine the arts of humankind throughout the ages.*

For just $12 (plus GST) you will receive three colourful, illuminating issues, delivered right to your door. With so much to discover, you'll want to be sure you receive every issue. Subscribe now and add to your collection.

ROYAL ONTARIO MUSEUM • 100 QUEEN'S PARK • TORONTO, ONTARIO M5S 2C6 • (416) 586-5758

THE MAGAZINE OF THE ROYAL ONTARIO MUSEUM

FOR THE BIRDS

HOW AN EXTRAORDINARY PARTNERHSIP BETWEEN A PAINTER AND A POET LED TO A SINGULAR GROUP OF BIRD PAINTINGS.

BY JOAN WINEARLS

WHEN ROBERT BATEMAN attended the ROM's Saturday Morning Club as a youth in the 1950s, a splendid collection of bird paintings hung on the Museum's walls. Those pictures, so vividly remembered by Bateman, would become an important influence on his own early wildlife portraits. Painted by British Columbia artist Allan Brooks, the Wallace Havelock Robb collection of bird paintings—though now exhibited only from time to time—is exceptional, one of the Museum's hidden treasures.

Acquired between 1927 and 1931, the collection was initiated through an extraordinary partnership between Brooks and poet Wallace Havelock Robb. Later, the Royal Ontario Museum of Zoology also joined the two men's common cause: educating the public on bird conservation.

WANDA DOBROWLANSKI, ROM

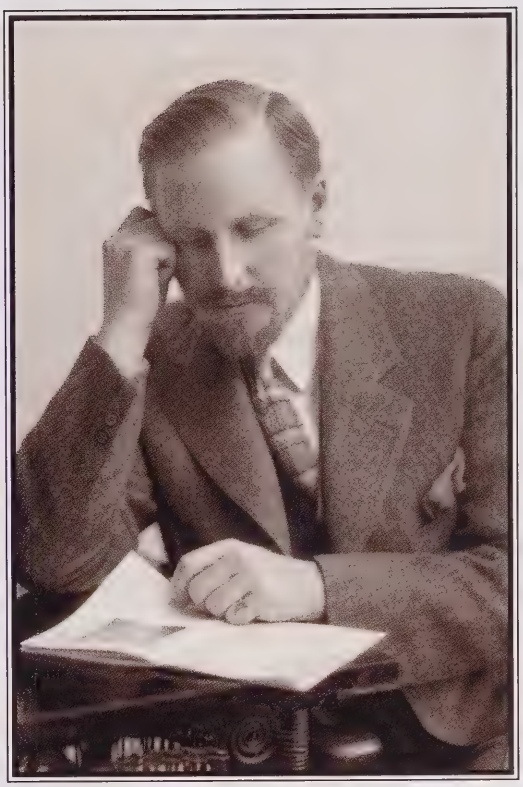
Blue Jay (1926) ably catches the "ghiz" of the bird and shows Brooks's excellent use of light and foreground detail. Funded by W. D. Robb, Montreal.

The painter

IN THE EARLY 1920S, Major Allan Brooks (1869–1946), Canada's most important bird painter in the first half of the 20th century, was approaching the height of his career, yet was almost totally unknown in his own country. Born in India in 1869, Brooks spent his early childhood in England and emigrated to Canada with his family in 1881, settling on a farm near Milton, Ontario. Six years later the family moved to Chilliwack, British Columbia. Brooks lived in the province for the rest of his life, settling in Okanagan Landing (near Vernon), eventually spending his winters in Comox on Vancouver Island, where he died in 1946. As one of the leading ornithologists and collectors of his time, Brooks helped to supply specimens for many major North American museums. But even from the beginning of his career, he supported himself by drawing and painting mammals and birds.

Most of Brooks's painting commissions came from the United States. From the 1890s to 1923 he produced more than 100 illustrations for articles, over 300 plates for books, and dozens of larger wildlife paintings for various collectors. Some of his finest work appeared in two major books: William L. Dawson's *Birds of California* (1923) and John C. Phillips's *A Natural History of the Ducks* (1922–1926). The beautiful translucent watercolour plates for the Dawson book and the large waterfowl landscapes in gouache for the Phillips book, both impressively reproduced, show Brooks at the peak of his powers.

Perhaps part of the reason that Brooks was



Left: Portrait of Allan Brooks taken in 1926 when he received the CNE Gold Medal. **Right:** Portrait of Wallace Havelock Robb in 1927.

ROM ARCHIVES

Allan Brooks and Wallace Havelock Robb at Brooks's home at Okanagan Landing, B.C., in September 1929.

not well known in Canada was that little money was available here at that time for publishing illustrated nature books. Still, in 1912 Percy Taverner, an ornithologist at the Victoria Memorial Museum in Ottawa—now the Canadian Museum of Nature—had managed to get funding for a book on the birds of Canada. Taverner greatly admired Brooks's bird art as well as his extensive ornithological knowledge and hoped that Brooks would collaborate with him. But World War I intervened, and Brooks went to serve in Europe. Taverner had to forge ahead without him on the first volume, *Birds of Eastern Canada* (1919). By 1922, however, with the war long over, Taverner was finally able to commission Brooks to paint a series of 100 small paintings of individual birds for the second volume, *Birds of Western Canada*, which was published in 1926.

The Common Loon (1925) in a familiar pose shows Brooks's wonderful draughtsmanship and sensitive interpretation of a northern lake (as reproduced in the Howard Smith Paper Mills calendar of 1928). Private collection.

HOWARD SMITH PAPER MILLS
LIMITED
HEAD OFFICE MONTREAL, CANADA
HIGH GRADE PAPER MAKERS
9th Month SEPTEMBER 1928
SUNDAY MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY
LAST QUAR. NEW MOON FIRST QUAR. FULL MOON
1
2 3 4 5 6 7 8
9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28 29
30
BELL-FAST BOND
A STRONG RAG-CONTENT PAPER FOR PERMANENT FORMS AND SALES-LETTERS.

By this time, Brooks was commanding prices of $35 and more per illustration in the US (and frequently the originals were returned so that he could sell them privately). But, out of a sense of patriotism, he pocketed his pride and his concerns about the quality of reproduction and supplied the illustrations, selling them outright to Taverner at $14 apiece. (The difference in the two fees, for comparison, was more than the $18 a typical industrial worker at that time would have earned in a week).

At about the same time, Brooks approached noted Toronto ornithologist James H. Fleming to help him find a Toronto dealer to sell some of his work. These efforts proved fruitless, and in letters to Fleming in 1922, Brooks despaired of getting major support or even recognition of his work in Canada: "I have quite given up the idea of selling in Toronto after reading your letter." Later, he lamented (perhaps referring to the illustrations for Taverner): "Nor is there a single picture in all Canada that represents me, only a few bad illustrations, made to other men's ideas mostly."

In the early 1920s, Brooks remained virtually unknown in Canada. But that was before he met W. H. Robb.

The poet

WALLACE HAVELOCK ROBB (1888–1976), the self-styled poet of Abbey Dawn (his farm near Kingston), was born into a prominent business family in Belleville, Ontario. As a boy, Robb was interested in poetry and, because he was talented in giving dramatic readings, was asked to read and teach poetry in his final year of high school. Later, he set up a company with his brothers in Belleville to market mechanical supplies. But by 1921, at 33 years of age, Robb realized that he was not cut out for business. He sold out to his brothers and set off for the United States to become a writer, poet, and nature photographer.

It is not certain what he saw of Brooks's work there, but Robb must have been impressed with *The Birds of California*. He went to some trouble to acquire a copy of the deluxe edition in 1924. That was several months after he had contacted Brooks directly in a letter—Brooks mentions Robb to Percy Taverner in the summer of 1923:

"What do you know about Wallace H. Robb? He has written me a long effusion telling me he is going to devote his life and poetry to the cause of bird protection 'after 1926,' and demanding that I supply him with bird pictures for the honour of Canada at a reduced price. Is he one of those sloppy, slushy, anti-sportsman types? Please tell me so I can guide myself in my reply."

Taverner's reply to Brooks betrayed the difficulties that he, as a professional ornithologist, had with a popularizer; he objected to Robb's sentimental approach to birds and the fact that Robb appeared to have "an uncomfortable amount of influence." Taverner feared that any "pop" project such as Robb's might draw money and support that would otherwise go to more scientific work in ornithology.

Despite Taverner's reservations, Brooks did eventually go along with Robb's scheme to create a portrait series of birds of eastern Canada to promote education about conservation issues. Robb, for his part, was committed to finding wealthy pa-

WANDA DOBROWLANSKI, ROM

trons to provide much of the funding: his own connections—including his patron Edward, Prince of Wales—proved useful. His plan, ultimately, was to donate the collection of paintings to "the people of Canada," as part of his larger educational goal.

Robb was no slouch in promoting conservation. In 1928 he set up one of the first sanctuaries for birds of prey at his farm. Later, in the press, he successfully attacked Jack Miner, the noted Canadian conservation pioneer and founder of a wild goose sanctuary near Kingsville, Ontario, for his policy of killing "bad birds" (hawks, owls, and crows). In the process, Robb created much publicity and support for the idea of protecting all birds.

By mid-1925, Brooks and Robb had worked out details for the first 15 pictures, mainly on Brooks's advice. Each painting was to show one or perhaps two related species, in a 9 x 12 inch (22.8 x 30.5 cm) format to allow for reduction when reproduced. Most birds would be drawn to the same scale, so that a grouse, for example, would nearly fill the sheet. Each bird would be placed against a "lyrical" background typical of the bird's habitat. Best of all, thanks to Robb's wealthy connections, he could pay Brooks the going American rate for illustrations—$35 each.

Because Brooks was not required to cram several species onto a plate and he had space for backgrounds, the project was one of his better commissions. Perhaps as a result, the paintings themselves turned out to be some of his best bird portraits. The colours are bold and the highlights show nicely, as by this time he was using gouache—an opaque water-based paint—rather than transparent watercolour, since gouache produced a stronger image for reproduction. An able draftsman, Brooks also had a photographic memory of the look of different birds; though working from preserved museum specimens, he easily caught the "ghiz" or distinctive pose and feel of the bird, whether active or at rest.

Above: American Goldfinch (1926) shows this bird perched on a thistle—its favourite food. **Below:** American Robin (1930) captures this familiar bird in a classic pose. It is a good example of Brooks's charming background landscapes and his wonderful rendition of light. Funded by E. W. Beatty of Montreal.

He was particularly skilled at depicting backgrounds, and many of the pictures are equally effective as landscapes and as bird portraits. Working from memory, Brooks produced some paintings of eastern fields and forests that suggest he also had English landscapes in mind. He had become adept at depicting light, whether in sunsets or in the play of sun and cloud, and many of the canvases are rich in atmosphere.

By April 1926, the series had grown to include 28 paintings and Robb began to worry about finding an appropriate home for it. Having received no encouragement from the Victoria Memorial Museum, he decided to approach the Royal Ontario Museum of Zoology (ROMZ), writing rather ingenuously: "If your building is fireproof and you are looking for assets of the sort that will be beyond duplicating, Brooks is the Master on birds in America and is of course a Canadian."

By the latter half of that year, mainly because of Robb's marketing abilities, the growing set of paintings had become much more visible in Canada, and so had Brooks himself. In October 1926, the American Ornithologists' Union (AOU) was to meet in Ottawa and, for an exhibit of bird art organized for the conference, Robb had arranged for Brooks to be featured fairly prominently even though acclaimed international bird artists such as Joseph Wolf, George Lodge, and Bruno Liljefors were also exhibiting. In a special exhibit room, 32 paintings of "The Wallace Havelock Robb Collection of Canadian Bird Pictures by Major Allan Brooks, D.S.O." were displayed as well as 96 small Brooks paintings done

for Taverner's *Birds of Western Canada*.

Robb had also enlisted the aid of Andy Clark, city editor of the Toronto *Globe*, to have the Canadian National Exhibition give Brooks a special Gold Medal Award of Merit and to exhibit his work. Presenting the medal to Brooks at the AOU banquet on October 13, Robb described the award as "an international sign of Canada's awakening to birdland [sic] and a symbol of Dominion-wide appreciation of your artistic interpretation of bird life." Embarrassed by the effusive citation, and perhaps feeling caught between a popularizer and his fellow ornithologists, Brooks is reported to have taken the medal and replied gruffly, "not guilty," before thrusting it into his pocket and sitting down. Later, however, Robb overheard Brooks showing the medal to a group of Americans, clearly pleased that he was finally receiving praise and acknowledgement in his own country.

Dr. J. R. Dymond, secretary and later director of the Royal Ontario Museum of Zoology, shown in 1953.

The Museum

DURING THAT SAME MEETING of the American Ornithologists' Union, Robb was able to move ahead negotiations with Dr. J. R. Dymond, secretary of the Royal Ontario Museum of Zoology, about acquiring the Robb collection. By November, the paintings were being readied for exhibit in Toronto. Robb, who wanted "pep and punch and publicity . . . [to] make the exhibit a living service in natural history education," was favourably impressed with the ROMZ's approach and the style of its published brochures. By the end of 1927 the Museum had received the first 51 paintings.

Robb had always intended to bring publicity to the collection of bird paintings and at the same time forward the cause of bird conservation; one of the ways he accomplished this was by having the paintings reproduced in various publications accompanying his own writing. As early as 1926, he wrote a series of popular articles on birds for *Illustrated Canadian Forest and Outdoors Magazine*, which ran 29 of the Brooks paintings. In 1927, Robb completed a series of poems, published as *The Quill and the Candle: Poems of Birdland in Canada*, which incorporated reproductions of five Brooks paintings.

Although these were reproduced in black and white, by late 1927 the ROMZ's Dymond was negotiating with Howard Smith Paper Mills of Montreal to reproduce in colour 12 of the Brooks paintings for the paper company's 1928 calendar, with individual prints to be sold separately for framing. The company's advertising manager, E. G. Rolph, assured Dymond that the reproductions would be even better than an earlier sample done by Brigden's "due to the fact that we have more colours at our command." His word proved good: the calendar was deemed a re-

Funding the Bird Portraits

Poet Wallace H. Robb was a driving force in raising the funds that made possible the collection of Allan Brooks's bird paintings, now in the ROM's collections, by using his personal connections to good advantage. Robb funded 21 of the Brooks paintings from his own pocket, and other pictures were financed by various people whom Robb knew in Belleville, Brockville, and Montreal, as well as by his father, W. D. Robb of Montreal.

Thirteen were gifts of W. H. Miner, a wealthy manufacturer from Chazy, NY, where Robb had lived some years earlier, and one was given by the Hon. W. D. Black, speaker of the Ontario Legislature. The painting of passenger pigeons was donated by Paul Hahn of Toronto, who was in the midst of a project to acquire passenger pigeon skins for the Museum. One painting of a bald eagle was funded by the Brodie Club of Toronto—the only naturalists' organization to support the collection—and others were sponsored by such diverse institutions as the Pittsferry United Farmers Club and the Guelph Humane Society.

Several paintings were paid for through the Royal Ontario Museum of Zoology's sale of reproductions. The eventual total was 72 paintings, depicting 83 species in all.

sounding success by painter, poet, and Museum. Brooks, in a letter to Robb, described the calendar as "a stunner," its reproductions of his work much better than those in some recent American books.

Howard Smith Paper Mills distributed 10,300 calendars in Canada and another 3000 abroad, and sold 1270 sets of bird prints. The Toronto Humane Society, which re-used the plates for its own 1928 calendar, said it had distributed 20,000 copies and could have used another 10,000. By the fall of 1929, ROMZ was working with Howard Smith to reproduce a second set of 12 paintings for the 1930 calendar.

In a letter to Brooks, the ROMZ's Dymond highlighted the popularity of the bird paintings: "I wonder if you realize how much the collection of your paintings, which we now have, has meant in the way of increasing the appreciation of our birds." Noting the large circulation of the Howard Smith calendars, he continued:

"Many of them [the paintings] have been used to illustrate nature articles in several Canadian journals and in a few United States publications. Several of them are now being reproduced for use in school readers and one of the local weekly papers [the *Star Weekly*] . . . is planning to use them in connection with quite an interesting educational feature. I think Mr. Robb's dream of making Canada a little more independent of the United States in the matter of nature education is in a fair way to being realized."

Robb had been hoping to bring the number of paintings up to at least 100, but with the onset of the Depression, funds for paintings from all sources had first slowed and then stopped. Robb (although he tried to borrow $1000 from members of the Brodie Club—a Toronto naturalists organization—and even considered mortgaging his furniture!) finally conceded defeat as he sent the last 11 paintings to the ROMZ in July 1931, bringing the total up to only 72: "The drop in the price of milk [from his farm] has crippled my plans—damn near crippled me . . . hope to make a better showing next year."

Marsh Hawk (1929) or Northern Harrier was purchased through the ROMZ's sale of reproductions and painted according to the Museum's request to show the different plumages of male, female, and juvenile birds.

Although the Museum itself during the 1930s and 1940s was unable to afford to reproduce Brooks's paintings in colour in its own ornithological publications, the paintings continued to be exhibited from time to time in the temporary picture gallery connected to the ROMZ, where promising young wildlife artists and budding conservationists such as Robert Bateman encountered them.

Brooks and Robb communicated less after 1931, but Brooks's debt to Robb and the importance of the collection for him can perhaps best be summed up by his appreciative words sent in a letter to Robb in December 1935: "Forget about any small balance that you say you owe me! We are all square and that is little enough to say to the only man in Canada who has had enough faith in me to put a lot of real cash into my pictures."

It's true that without the Wallace Havelock Robb collection, the reproductions, and the ROMZ's exhibition program, Allan Brooks might have remained relatively unknown to the Canadian public. But Robb, too, reaped rewards: working on the collection brought much publicity to his poetic publications and his efforts in support of nature. And for the ROMZ, the collection added greatly to its reputation for running educational programs on bird conservation. Each did very well out of the partnership. And each—poet, bird painter, and Museum—showed real foresight in imagining how effectively bird portraits could captivate people's imaginations and bring issues of bird conservation into the public spotlight. ●

The research for this article has come mainly from various ROM records and personal papers in the ROM Library and Archives, the Wallace Havelock Robb Papers at Queen's University Archives, and the A. C. Brooks Papers in British Columbia.

By Judith Eger

For our roving biologist, on-site bats proved immensely rewarding came from unexpected quarters.

The Bats of Vietnam

Photographs by James Knowles

In 1997, I went to Vietnam looking for evidence that certain Madagascar bats had roots in Asia. What triggered my search for the Asian connection was a study revealing that several groups of bats found in Madagascar were also found in Asia—but not in nearby Africa. Vietnam's different fauna was so largely undocumented and compelling, however, that what started out as a single trip to Vietnam had by May 2000 turned into four, and the scope of the project had burgeoned to encompass the entire bat fauna of Vietnam.

During the first three trips, I led ROM teams that collected bats in the karst limestone mountains of Vietnam's north, in the lowland rainforest and coastal areas of the south, and in the remote central highlands. In May 2000, we were returning to the north to explore new areas. Part of our mission was to document the biodiversity of Vietnamese bats in an effort to help the Viet Nam Institute of Ecology and Biological Resources with its study of biodiversity and conservation of endangered habitats and species. On each tour we had discovered more and different species of bats, and a story had begun to emerge: Vietnam was the meeting place of two very different bat faunas—a northern fauna resembling the Indian bats and a southern fauna with species more like those from Malaysia and Indonesia.

I had more work to do on my theory, and this fourth field trip would give me ample opportunity for that. There would be new bat discoveries and exotic scenery, of course, but also the unexpected delights of living and working among locals in the tiny, remote village of Lan Dat and the popular tourist destination of Sa Pa.

Getting to Lan Dat was a challenge. After four bone-jarring hours heading northeast from Hanoi in two four-wheel-drive vehicles, a Mitsubishi and a Russian jeep, this season's ROM party—Vietnamese colleague Nguyen Truong Son, ROM mammalogist Burton Lim, departmental associate Lorelie Mitchell, volunteers Piet van Dijken and James Knowles, and I—arrived literally at the end of the road in the village of Huu Lien near the Chinese border. We spent our first night as guests of Mr. Luan, chairman of the local commune.

Our main task here was repacking our field gear into parcels of 20 kilos each for the 25 porters who would accompany us the next day on the 10-kilometre hike to Lan Dat, our batting destination.

Opposite page. Top: The author with Zao women and children near Lan Dat, Vietnam. **Bottom:** A short-nosed fruit bat, *Cynopterus sphinx*. **Left:** Vista of the terraced fields of Sa Pa, Vietnam.

The next morning we were up at 5 am to repack the final bundles. By 7:30 when we set out it was already 30°C (86°F). Important contrasts between ourselves and our porters quickly became obvious. They were fit for walking in the heat, we were not—and they walked either in bare feet or in plastic sandals while we sported hiking boots. In seven hours, we traversed the broad valley in which Huu Lien sat, circumvented a karst mountain, and envied water buffalo wallowing in mud pools. Scrambling up the narrow jungle path, we lagged at least an hour behind our porters. Haggard, sweating, and puffing, we came to the top of another karst mountain to find our porters laughing, chatting, and taking a cigarette break.

A steep descent brought us into the village of Lan Dat, a place that seemed suspended many years back in time. Completely agrarian, Lan Dat is home to the Zao, an ethnic minority group who moved into Vietnam from China decades ago but came to this valley just two generations back. Lan Dat is a true commune—the villagers work together to grow rice and keep animals. The women of Lan Dat dress in traditional costume, the men hunt with ancient muzzle-loader guns, and because the village is without electricity the children have few outside influences.

The village's headman, Mr. Duong, is strong and energetic, and though only 25 or 30 years old, he is a very capable leader. His house is the central gathering spot and social centre for the village. Mr. Duong and his wife take in the rare foreign traveller that comes by, as well as local visitors—the woman from the next village who needs rice, the school teacher passing through.

The town of Sa Pa overlooks mist-shrouded Phang Si Pang, the final peak in the Himalayas.

Considering ourselves self-sufficient, we set up camp in a dormant rice field a few hundred yards from the village. Three sleeping tents and a table, made on the spot from pieces of salvaged wood, with a tarpaulin roof to shade us from the baking sun, completed our home away from home. Our cook, who had come with us from Huu Lien, prepared our meals over an open fire at Mr. Duong's. The few items of fresh food we had brought with us—eggs and a chicken—were quickly depleted and soon we were living on dry shredded pork, rice, canned meat, and innumerable packages of instant noodles. We finished each meal with small cups of green tea. The occasional batch of peanuts, salted and fried in oil, was a real treat.

In the first few days we set up 9- and 12-metre- (29½- and 39¼-foot-)long nylon mist nets over streams, and harp traps, which have a rigid frame strung with taut nylon string—across forest trails to catch bats; we set live traps to catch rodents. I was hoping we might find a few rare bat species known from only one or two isolated caves in northern Vietnam and Thailand, such as the tiny bumble bee bat, *Craseonycteris thonglongyai*—the smallest bat in the world—and *Rhinolophus paradoxolophus*, named for its bizarre-looking facial appendages. In the harp traps we managed to catch small, agile species such as *Aselliscus stoliczkanus*, the Trident-nosed bat, and *Murina cyclotis*, the Round-eared Tube-nosed bat, while the mist nets set over the creeks were effective in snaring species that regularly cruise the creek looking for insects, such as the Harlequin bat, *Scotomanes ornatus*.

During the heat of the day, we photographed our catches of bats and the occasional small mammal brought in by villagers, prepared specimens, made catalogues, and kept notes, all on the multipurpose table. Our presence in the village attracted much attention especially from the children, who regularly watched us prepare specimens—documenting the geographic environment in which each was found, measuring and preserving tissues for future genetic studies, and preserving the bats themselves for the ROM's collection. Normally very shy, the women of the village were curious about the giant foreigners who were working in their midst. They would stare, incredulous, at the lineup of large rubber boots outside the door of the Duong house.

As I was removing several live *Cynopterus* from a mist net over a river one night, I heard a large bat fly into another net behind me. Quickly, I grabbed the newcomer, which turned out to be a Shield-faced Roundleaf bat, *Hipposideros lylei*. This is the first record of the species in Vietnam, representing an extension 900 km (558 miles) eastward of the bat's previously known range. This large carnivorous species, with a wing span of 40 cm (16 inch-

es) was attracted to the net by the sounds of the trapped fruit bats, hoping to make an easy meal of them.

Although none of these bat species or their relatives are found anywhere close to Madagascar, their presence here in northeastern Vietnam greatly extended our knowledge of the distribution of some very rare species of bats. Vietnam's fauna has been little studied over the last 50 years because of the wars being fought there and the post-war cleanup. It is only through fieldwork done by the ROM and other international museums in collaboration with the Vietnamese during the 1990s that we are beginning to understand the complexity of the Vietnamese fauna. Lan Dat was to fill in another piece of the puzzle. Here, there were species also found in India, Thailand/Laos, and China.

The collecting was going well. But assigning relationships among species on the basis of external appearance only is dicey, and I would need a variety of tools when I returned to my lab at the ROM to further examine the Madagascar-Asia connection and to sort out some "made in Vietnam" identification problems (see *Identifying the Cynopterus Bats*, page 23).

Each day involved constant rounds of early checking of traps and nets, photographing and preparing specimens, purifying drinking water, visiting nearby caves or setting more nets, opening nets—just before dark to avoid catching birds—and, after dark, checking nets and harp traps again. By the end of a week we had all this down to a routine—until our second-last evening at camp. That's when the rain came.

The day had been oppressively hot, and by late afternoon, ominous-looking cumulus clouds were forming over the karst mountains surrounding the village. We welcomed the first downpour as an easy way to take a shower and cool off. But as the day wore on, the rain continued steadily. A rainy night means a slow night for bats; they do not forage for insects in such a downpour. As darkness descended, though, some of us—in our tall rubber boots—navigated carefully past the village's flooded, oozing pigsty and into the swollen streams and inundated paths and fields to check our traps and nets.

Undaunted by the weather, Burton Lim, who with Mr. Duong had already gone several times on caving expeditions, set out for some nearby caves. He returned later that evening, shielded under an enormous "elephant ear" leaf, with an important catch—a single specimen of the hoped-for *Rhinolophus paradoxolophus*, a species with very large ears and complex nose leaf not previously recorded this far east in northern Vietnam. Considered rare, its presence in Lan Dat reflected another range extension.

Back at camp we elevated our field equipment and tucked it under tarps. Hoping to escape the rain and damp we turned in to our tents. But by 3 am the camp was awash in several inches of water; the piercing sounds of untold numbers of suddenly energized frogs calling made it impossible to converse, let alone sleep. Mysterious lights bobbed to and fro across distant rice paddies and along

Top: The ROM field crew's tents set up on the balcony of the Duongs' house in Lan Dat. **Middle:** A street scene in Sa Pa. **Bottom:** Bat species clockwise from top left: *Hipposideros lylei, Hipposideros armiger, Rhinolophus rouxii, and Rhinolophus paradoxolophus.*

the edge of the forest. It seemed like a surreal dream.

We spent the rest of the night trying to limit the water damage to our equipment and specimens, and very early in the morning we ventured out to take down our nets and traps. Not surprisingly, leaves, twigs, and the occasional frog were all we had caught. Our self-sufficiency in tatters, we requested permission to move our tents and gear into Mr. Duong's house. Or, more accurately, onto Mr. Duong's house: we climbed the ladder and set up shop on a broad balcony off the main living quarters.

The benefit: we were seven feet or so above the by-now sodden ground. The drawback: the balcony also served as a roof for a cacophonous variety of livestock and semi-domesticated animals—water buffalo, chickens, pigs, ducks, and dogs. Their sounds and smells, and the unusual consistency of the mud down below, were a constant reminder that, whatever else you did, you needed to exercise care when descending the ladder. Falling down would have been a never-forgotten experience!

The next night was our last, and our hosts held an evening celebration, a custom we had enjoyed many times in Vietnam. Along with the extended Duong family, we were joined by the policeman from Huu Lien. A special "tablecloth" was set on the floor and the stiff North Americans sat down to an unforgettable feast. The Duongs had prepared a freshly killed chicken, and made "nung chow," a special noodle dish with chicken lights (innards). A second dish consisted of small frog bits (chopped bones included) rolled up and cooked in leaves. The village children had collected the frogs the previous night with the aid of their flashlight headlamps—which explained the mysterious lights we had seen in the downpour. A lip-numbingly potent rice wine aided the convivial mood and helped the conversation, which took place through our Vietnamese colleague, Son, and through eye contact and hand gestures.

Hmong youths in indigo-coloured clothing carry hand-woven baskets typically used while working in the rice fields or going to market.

To thank our hosts for their hospitality, we usually leave small gifts—a flashlight, a pocket knife, a knife sharpener. Usually, though, the hosts are men. This was the first time we had had the opportunity to give a gift to a woman, and I was unprepared. Then I remembered that when the women were not busy cooking, cleaning, clearing trees, or cutting feed for the pigs, they were often stitching ornate bands. A quick rifle through the photography supplies turned up the perfect impromptu gift for Mrs. Duong: a yard of iridescent, shimmering material that I had bought as a reflective backdrop for photographing bats. She was so pleased with it that in return she presented me with a recently finished hand-embroidered collar—a gift that I treasure.

We spent the next couple of days cleaning up and storing specimens and records in Hanoi, a drastic contrast to Lan Dat, especially with the noise of the traffic. In Vietnam, the horn is the most important component of a vehicle; its use supersedes any other rules of the road. We met up with another Vietnamese colleague, Pham Tien, and from Hanoi we headed together to our final collecting site, Sa Pa. During the day-long trip along a winding road across northwestern Vietnam we stopped briefly at the border village of Lao Cai to look across the bridge into China—still guarded by armed soldiers since the Chinese incursions of the 1970s. Getting to Sa Pa, we passed through corn, cane, and cassava fields to mid-altitude tea-growing regions and into the high altitudes where a single crop, rice, is grown on Sa Pa's terraced hillsides.

Like Lan Dat, Sa Pa is near the Chinese border. Unlike Lan Dat, which welcomes Western visitors only once every few years, Sa Pa is a popular base for Westerners with designs on hiking to the top of Phang Si Pang, the final peak in the Himalayas and, at 3148 metres (10,325 feet), Vietnam's highest mountain. Staying in one of the many guest houses, we were delighted by our new location's considerably lower average temperature; the weather was always cool and damp. Perhaps even more exciting after living on instant noodles, here we could eat in local restaurants.

In Sa Pa, the Hmong women who come in from the neighbouring village of Cat Cat, and the Zao who travel from Ta Phing a few miles away, offer plenty of unsolicited opportunities to buy souvenirs. Whether working in the fields or selling indigo-coloured shirts, smocks, hats, or silver jewellery, the Hmong wear their handsome traditional indigo costume. Among the Zao at Ta Phing, the

children and women wear traditional costume while the men tend to dress in T-shirts and trousers. At a very young age, the children learn to barter; when we asked a young girl about 7 years old selling bracelets if we could photograph her, she proposed, "You photo me, you buy."

We marvelled at the terraced rice fields carved from the steep sides of the mountain in the Sa Pa area. All the field work is still done by hand, using water buffalo to till the ground. Judging from the numbers of terraced fields, the Hmong and Zao people have been established here for many generations.

Up in the mountains, bat-catching presented different challenges from those in Lan Dat. In Sa Pa, we worked predominantly inside and around the caves where many bat species roost. In a cave at Ta Phinh—surrounded by our usual entourage of interested villagers—we were excited to find many *Hipposideros armiger*, the Great Roundleaf bat, a species unusual in other areas of northern Vietnam but seemingly common here. At this altitude, only insectivorous bats and carnivores such as *H. armiger* are found. Although the species diversity was low, the number of bats was relatively high.

Not surprisingly, the weather can be unpredictable in this mountainous region. A netting expedition one evening took us to a beautiful stream bed high in the mountains above Sa Pa, and ended in a cold, soggy nighttime tramp back to our vehicle. But the scenery was breathtaking, and catching a different species of bat, *Rhinolophus rouxii*, a forest species that lives in areas of high rainfall, was reward enough. Our final night of collecting netted us another record for the area, *Rhinolophus marshalli*, a smaller version (with a less complex nose leaf) of the rare *Rhinolophus paradoxolophus* caught at Lan Dat. Originally described from Thailand, *Rhinolophus marshalli* is also very rare, found in north central Vietnam and southwest China. All the bat species at Sa Pa except these two were species I would expect to find in India.

Before leaving Sa Pa, we ventured down the mountain to the Hmong village of Cat Cat. I wanted to buy a *khen*, an instrument that looks like a bagpipe without the bag and is made from bamboo. Cat Cat is a series of homes on the terraced slopes, running down into the valley. It is said to be easy to get to Cat Cat but difficult to leave, and once you have tried climbing up the slopes, you know why. We occasionally shared the steep, narrow walkway with a few local water buffalo.

Our final dinner in Sa Pa was another celebration. For this occasion, our Vietnamese colleague, Pham Tien, had arranged a Western dinner—smoked ham, sausage, bread, baked chicken, cucumber and tomato slices, fruit plate, and a cake with birthday wishes to two of our team members, Burton and Lorelie, finished off with sparkling wine.

With the completion of our fieldwork, the real work was just beginning. Back at the ROM we would try to complete the picture of Vietnam's bat fauna and how the Asian bats managed to reach Madagascar. Questions like these are not answered in the field, but by piecing together the information acquired on field trips and from other collectors, and through morphometric and genetic studies in the lab.

When we left Sa Pa, it looked the same as when we arrived—shrouded in fog. We never did see the final peak in the Himalayas, Phang Si Pang. But this trip, even more than those of previous years, left a deep sense of the friendliness of Vietnam's peoples. As our van bumped and twisted its way back to Hanoi, with our driver's favourite Vietnamese popular music wafting out through the windows, I reflected back on the month in Vietnam. Whether shopping in Sa Pa's colourful market, investigating a mist net at night in the tropical forest of Lan Dat, or pursuing bats in a damp limestone cave high in the hills around Ta Phing, I had felt surrounded by people who, beyond their curiosity at our strange appearance, radiated a genuine warmth for the strangers in their midst.

Identifying the *Cynopterus* Bats

From India to Vietnam, south and east through Malaysia, Indonesia, and the Philippines live the seven species of short-nosed fruit bats belonging to the genus *Cynopterus*. For decades, the classification of these seven species has been confused. To clarify their taxonomy, the ROM is conducting a genetic study of this bat group using mitochondrial DNA—genetic material taken from a small, energy-producing organelle, many of which occur inside each cell.

Cynopterus sphinx (page 18), is a species abundant in agricultural and forested areas of Southeast Asia. Living in small colonies of three to four or more individuals, this bat is known to construct elaborate tents in palm trees. By biting across the width of the palm frond, the bat causes the end of the frond to collapse and form a tent, which it uses to roost in during the day. *Cynopterus sphinx* is a voracious feeder on ripe fruit, making it a nuisance with fruit farmers.

It is important to determine which species of *Cynopterus* occur in which areas because conservationists are concerned, for example, that greatly increased cultivation has caused a more common species, *Cynopterus sphinx*, to proliferate and outcompete the smaller, uncommon *Cynopterus brachyotis*. Perhaps the latter needs protection and the former needs to be controlled. The genetic and morphological work will help biologists working on such problems to identify these species in the field.

Memories of Afghani

As a young student, our writer realized her dream of visiting the exotic lands she had known only through books and slides. Thirty-five years later, she recalls the vast archaeological treasures she explored in a land not yet ruined by tragedy.

By Lisa Golombek

This page: Bronze objects of daily life, from Ghazna and Herat, 12th century. Left to right: star-shaped oil lamp, pedestal oil lamp, crucible for grinding indigo, incense burner. **Opposite page, top:** Carved marble stone with Arabic inscription claiming it to be the tombstone of Ali, son-in-law of the Prophet, now kept at Mazar-i Sharif. **Middle:** Mosaic tile decoration at Gazurgah, 1425. **Bottom:** Illustration to a 15th-century copy of Firdawsi's *Shah-namah* ("Rustam slays Isfandiyar").

stan

PHOTOS BY AUTHOR, UNLESS OTHERWISE INDICATED. THIS PHOTO: BRIAN BOYLE, ROM 983.14.5, 920X98.6, 983.15.2, 969.118.3

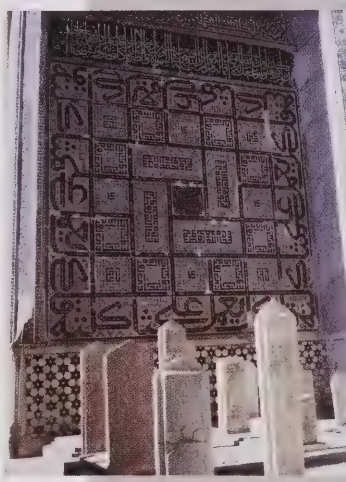
THE LETTER FELT THICK. It was not the kind that tells you: Sorry, but there were many worthy applications. That wouldn't have taken more than a single page. My throat went dry and my heartbeat accelerated. What if I got the research money I had asked for? Would I be up to making a journey to Iran, Afghanistan, and Central Asia, a young woman travelling alone, barely able to speak the languages necessary—Persian and Russian? Would I be savvy enough to seize opportunities for help and yet keep danger at bay? Would it be lonely?

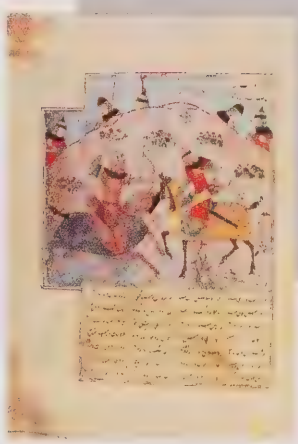
The envelope held a letter of congratulations from an American granting agency formerly known as the Ford Foundation, and a wad of papers to fill out. Immediately, I signed my acceptance and began transforming my fantasies into reality. How often had I wished to see the exotic lands I had come to know only through books and slides! It was 1966 and I was completing my doctoral studies on the architecture of the Timurid dynasty (1370–1506), the descendants of the Turco-Mongol warlord Timur—or Tamerlane as he was known in the West—himself a distant descendant of Chinghiz (Ghengis) Khan. So many questions about the architecture could be answered simply by being there, and suddenly, being there was within my grasp. All I had to do to get to Samarqand, the Timurid dynasty's capital, was buy a ticket. And now I had the means to do it.

Timur was laid to rest in 1405 under a magnificent fluted blue dome in Samarqand. Born in the early 14th century in present-day Uzbekistan, Timur as a young mounted warrior quickly rose to power, capturing Samarqand to make it his imperial capital. For the next 30 years he and his band of horsemen terrorized Iran and Afghanistan, destroying large populations. But, surprisingly, to lend panache to his capital, he spared the men of arts and letters. Timur and his descendants left a marvellously rich legacy in architecture and the arts.

In architecture, they established new canons of proportions and standards of technique. To my eye, the geometric shapes of their buildings, the graceful tapered minarets, all draped with fabric-like patterns of glazed blue and turquoise tiles, are simply irresistible. The majestic melon-shaped domes set high above cylindrical drums leave an indelible impression. My intention was to track down every last building erected over the century of Timurid rule. This meant dropping in on about 40 towns and villages in Iran, Afghanistan, and the former Soviet Central Asian republics (now Uzbekistan, Turkmenistan, Tajikistan, and Kazakhstan).

I could not have imagined then that one of my key destinations, Afghanistan, would in nine short years begin to suffer a series of wars and world disaster—the deaths of a million Afghan people and the consequences of, half a world away, the terrorist attacks of September 11. With Afghanistan so much in the news last fall, and the familiar names of cities I had visited years before on everyone's lips, I first began to think about writing this





967.315.3, NEAC ARCHIVES

memoir. The widespread mispronunciation in the news media of the names of Afghanistan's towns and cities made me realize how little, outside a small circle of scholars, was known in the West about Afghanistan and its remarkable cultural history.

Back then, any fears I felt were of an entirely different nature. I compensated for my anxiety about the trip by buying the largest suitcase I could find and stuffing it with clothing and accessories for every possible contingency. When I finally arrived in Tehran three months later, I quickly realized how little of it I would need.

Clothes I had imagined wearing, such as shorts or painter's overalls, would have been entirely inappropriate. I hadn't realized how traditional even the larger towns would be, though

Map of Afghanistan indicating where the author visited.

only when visiting a pilgrimage site was I required to wear the *chador*—a large semi-circular cloth draped over the head and body, leaving the face more or less visible—which an Iranian friend had sewn for me. A long safari skirt and jacket from Abercrombie and Fitch, a denim "turban," and a pair of beige Naturalizer Oxfords became my uniform. It was comfortable, cool, and acceptable to the villagers.

Tehran was a modern city plagued with traffic jams even then. It served as my base, but I always looked forward to escaping from it back to the countryside where life was much simpler and the people more friendly. I carried letters of introduction from Iranian government officials to the local governors of the towns on my route, and often they obliged by putting me up with their families and arranging for trustworthy drivers and cars.

Arriving at a site, the driver would pass on to the local guardian the information about who I was and what I wanted to see. After all, recording the sites was an involved process—walking about to get a sense of the whole, photographing essential views, figuring out the individual spaces, and photographing, drawing, and measuring each one in addition to finding and recording any inscriptions. The guardian would do his utmost to assist me, even if it meant holding the end of my measuring tape while I recorded the dimensions of a building!

After a month in Iran, I flew to Kabul. I made similar arrangements for visiting Timurid sites in Afghanistan through the Kabul Museum. It was in Afghanistan that I enjoyed some of my most exciting adventures, and the theme for my thesis—the practice of burial outside rather than inside a domed mausoleum—emerged there. Afghanistan's capital, in 1966, seemed small, hardly urban at all except for a cluster of Western buildings. The newest hotel was built and run by Germans. A few steps down the street, groups of Hazarah tribesmen from the central mountain regions huddled around the local bazaar's open-air stands. Their facial features reminded me of their descent from the Mongol hordes of Chinghiz Khan. I liked to imagine them as the lightning horsemen of Timur. There were also merchants of Pakistani or Indian origin presiding over barrels filled with rolls of textiles without much character compared to the medieval handwoven textiles and carpets I was used to studying.

Here and there in Afghanistan European faces emerged, some Russian, some Bulgarian, a few American. Most were involved in "helping" Afghanistan enter the 20th century. In Herat, where I intended to do most of my research, I befriended a group of Bulgarians. They were constructing the road that connected Herat with the Soviet republics, which must have proved useful in their subsequent invasion of Afghanistan. The Americans, too, were building a road, theirs leading into Iran.

It is sad that during the 1990s much of Afghanistan's heritage "disappeared" into private hands. When I was there, the Kabul Museum still had a fabulous collection of antiquities looked after by a director who had been trained in the West. Even sadder is that in recent times cultural artifacts that had not already disappeared have been deliberately destroyed by the Taliban. Thinking that the two colossal Buddhas of Bamiyan would always be there for a return visit, I never did go to see them. From photographs, they struck me as reminders of something greater than one's self. Though their faces had long been tortured by anti-idolators, their unflapping stone robes suggested peace for eternity. Afghanistan held many such treasures, but I had to keep reminding myself that, if I were to accomplish my mission—recording all the

Timurid sites—I could not allow myself to be distracted.

At first, my research project seemed perfectly manageable and I thought that I would easily be able to visit the many towns in Afghanistan with Timurid connections within the allotted time. As the trip progressed, however, I began to "discover" many new sites, and my project grew. I say "discover" in quotes because while the sites were new to me, the local people had known they were there all along. They just didn't understand why anyone else, especially a young American woman, would be interested.

Balkh

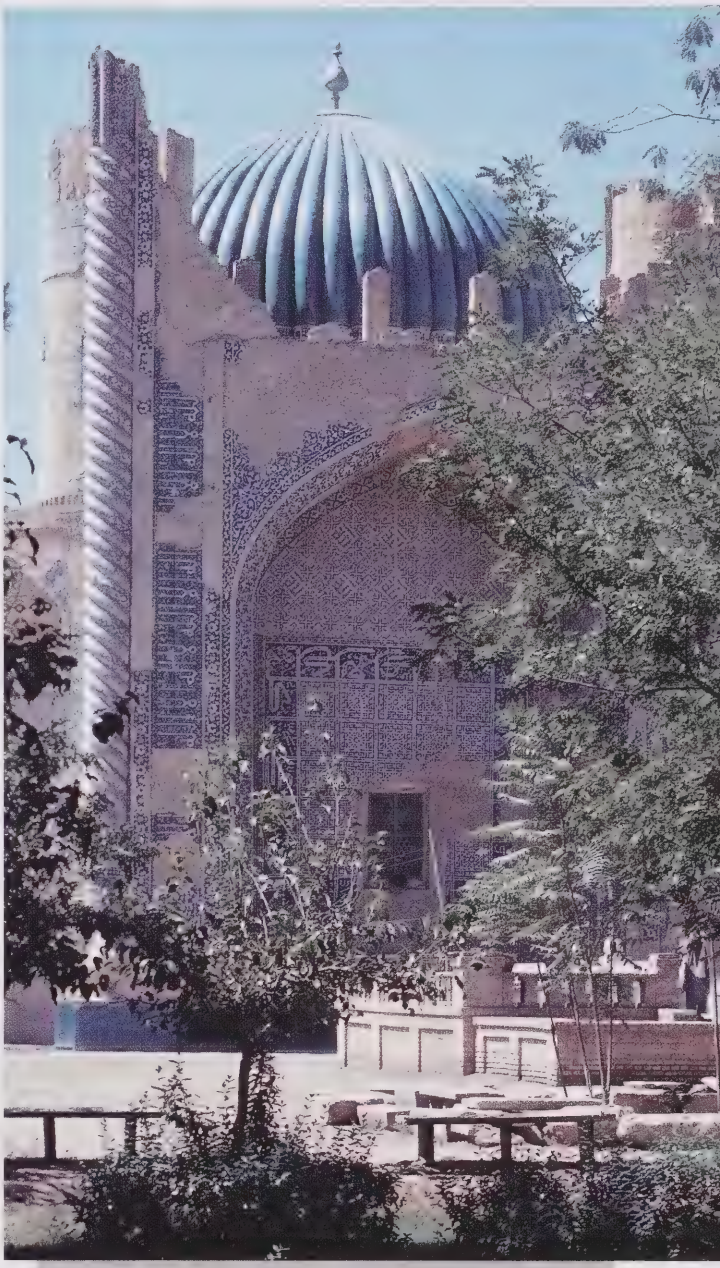
In Balkh, after an exciting discovery that took me back to the 9th century (see "Discovering Afghanistan's Earliest Mosque," page 22), I visited the magnificent shrine of a Sufi shaykh, Abu Nasr Parsa (d. 1460), leader of the Naqshbandi dervish order. The shaykh's tomb lies in front of a looming arched portal, and behind the portal screen rises a majestic turquoise dome of bulbous profile. It reminded me of the fluted dome over Timur's own tomb in Samarqand and was almost certainly inspired by it. The outer walls of the building are sheathed in mosaic faience, designs composed of tiny pieces of glazed tile fitted together like a jigsaw puzzle and set in mortar.

But there was a mystery here. Why was the shaykh buried *outside* rather than inside this splendid building as one might have expected? And who, if not Abu Nasr Parsa, is buried in its crypt? There is no tombstone over either grave. The question of burial outside, rather than inside, a building came up again and again during my research tour and finally became the subject of my thesis. Eventually, near the end of my trip, I found the answer to this puzzle.

Mazar-i Sharif

The name Mazar-i Sharif means "the noble shrine." A Shiite place of pilgrimage, the city is believed by some to house the tomb of Ali, cousin and son-in-law of the Prophet Muhammad, despite the more widely held belief that Ali is buried in Najaf, Iraq, where he died in 661. Ali, a champion of social justice and wedded to a direct descendant of the Prophet, is the central figure in Shiite hagiography, which holds him to be the only rightful successor to the Prophet. Only after two other caliphs (meaning "successors") had served, was Ali eventually elected, and later he was assassinated. This act left the Muslim community divided into two factions, the Sunnites (orthodox) and the Shiites (followers of Ali and his descendants). In fighting for these religious beliefs, Ali's son Husayn was slain by a rival faction in 680. (His death was considered a martyrdom and gave rise to the idea, still popular with many Muslims today, that sacrificing one's life for religion is desirable.) But how can we explain the existence of a second tomb of Ali in Afghanistan, where Ali never ventured? Through miracles, of course.

The story goes that back in the 12th century, in a series of visions witnessed by over 400 people, the Prophet was seen identifying this site as Ali's tomb. Digging at the site revealed a tomb with the body intact and a red brick under its head inscribed with Ali's name. Sultan Sanjar had a stone carved with the inscription from the brick and a domed mausoleum built over the grave. By the 15th century, people had forgotten about the shrine until a visiting shaykh came across the story in a history book (written by a Spanish Arab!) and persuaded the local governor to investigate.



Shrine with turquoise ribbed dome (restored) built behind the grave of the revered Abu Nasr Parsa in Balkh.

In reality, in the ruin of the mausoleum they rediscovered the engraved stone inscribed: "This is the Favourite of Allah; Ali is the Lion of Allah; this is the tomb of Ali." Quranic verse on the stone refers to Allah as the Knower of the Hidden and

the Evident, perhaps an allusion to the mysterious history of the tomb. In 1480, the Timurid Sultan of Herat heard of this strange and miraculous event and ordered the construction of a new and splendid mausoleum, as well as commercial facilities to accommodate the many pilgrims whom it was expected to attract. The shrine became so popular that the village was transformed into a city and replaced Balkh as the chief town of the region.

The gravestone is now stored in the shrine, its authenticity undoubted. Because Arabic writing can easily be dated by the style of the script, I was curious to see the stone for myself. It turned out that the script dates to the 12th century, the time of the first "discovery" and not the time of Ali's death. (So, title to the tomb of Ali still rests with Najaf, Iraq.) In the 19th century, the Timurid buildings at the shrine of Mazar-i Sharif were so greatly enlarged that the original parts were no longer visible. It was difficult for me

Grand entrance to the famous Shrine of Hazrat Ali at Mazar-i Sharif.

to tell what the Timurid sultan had actually done there; the building's two new and splendid turquoise domes and many candy-striped towers stood in the way.

Ghazna

Some 145 kilometres southwest of Kabul, Ghazna lies on what was once the frontier between the Islamic world and

Discovering Afghanistan's

While visiting the northern town of Balkh, Afghanistan, I came across the most memorable discovery of my trip. The year was 1966 and I was visiting Iran, Afghanistan, and Central Asia to study the architecture of the Timurid dynasty (1370–1506). Once Balkh, known as the "Mother of Cities" (*Umm al-bilad*), had been the leading city of the northern region in Afghanistan. But some 500 years before my visit it had declined to the status of village. I was fortunate to have as company another young woman, an American who was working for the Peace Corps at the Kabul Museum. She spoke fluent Dari (the Afghan dialect of Persian/Tajik), which I struggled with; to my ear the language sounds as if all the vowels have been dropped.

I could not resist looking for some trace of the early metropolis of Balkh, even though the search would distract me from my subject of research. I knew that before the Arabs arrived in the 8th century, Balkh (or Bactria) was the site of an important Buddhist monastery. A vast acropolis and other ruins outside the town are recorded, but none of the monuments had been identified by scholars. Somewhere might be found the remains of the Friday Mosque. I had read an interesting story about this mosque in the Arabic travelogue of Ibn Battutah, a Moroccan who visited Balkh in 1325. He tells us that about a century before his visit, Chinghiz (Ghengis) Khan was also there and heard that a golden treasure had been buried in the Friday Mosque. Chinghiz Khan ordered his Mongol troops to find it, even if it meant toppling every column. Ibn Battutah relates that, although the Mongols destroyed the entire mosque, the treasure was never found.

Curious to follow this story up, I asked our driver to find the local shaykh who could be expected to know not only about religious matters but also about the history of the village. We found him sitting on a wooden chair in the shade of a tree, clutching a walking stick. The shaykh was an elderly man with a thin white beard, dressed in robes

Earliest Mosque

and a turban. When asked if he knew where the mosque destroyed by Chinghiz Khan had stood, I was sure he would simply wave his hand and smile, dismissing the story as a fairy tale. Instead, to my surprise, he motioned toward the car and we got in, and the shaykh directed my driver to the site. After an hour of driving through clouds of dust, the car came to a halt. I looked up and could not believe what came into view. Stumps of toppled brick pillars, topped by carved stucco capitals—blocks that support the arches—were still joined to one another by arcades sheathed in beautiful carved stucco.

The geometric designs filled with floral ornament resembled the pavement mosaics of Islam's Mediterranean heritage. One would expect this in Syria, the original capital of the Muslim Empire, but not here on the eastern frontier of the Islamic world, thousands of kilometres from the Mediterranean.

I knew that in the early 8th century, when the first rulers of Islam required palaces, they hired craftsmen trained in the Hellenistic style of the eastern Mediterranean. However, the floral ornament in the stuccoes at Balkh was not naturalistic as these early styles had been in the Mediterranean. Rather, it struck me as closer in style to the abstraction found in 9th-century palaces excavated in Iraq. In 750, the capital of the Islamic Empire shifted to Baghdad from Damascus. By the 9th century, a taste for abstraction had set in. First the classical vine leaves lost their veins and became encircled by the vines. Then, the leaves and their backgrounds blurred and the whole became a rhythmic pattern stretching across the wall, subject and background indistinguishable.

Here at Balkh, the leaves could still be made out, but the frames around them bend and distort the natural shapes. This abstract style dated the building to the 9th century, making it the earliest mosque in Afghanistan and one of the earliest in the whole region east of Baghdad. What was amazing about this imperial mosque was its location so far from the Islamic capital, Baghdad. It shows how important were the standards and styles set by the imperial centre. Back home when I researched the scholarly literature, I was surprised to find no mention of it nor of any attempt to locate the mosque destroyed by Chinghiz Khan. I wished I had taken more pictures! Was this in fact the mosque mentioned by 14th-century traveller Ibn Battutah? It's doubtful, since the mosque I had seen was too small to be a Friday Mosque. Its ground plan resembled a tic-tac-toe board—only nine domed bays in a square, hardly enough to accommodate the whole male population of Balkh in its prime. The Friday Mosque, and perhaps its treasure, are still to be found.

"pagan" India. What drew me there were two Timurid mausoleums built at a time when the dynasty was in its decline; they lacked tiled ornament and there was a slap-dash quality to the building construction. Of much greater interest were the remains of an earlier dynasty of princes, the Ghaznavids (977–1186), who ruled an empire that once stretched across today's border into Iran and Central Asia. Tucked up in the mountains was the citadel with the houses of nobles hugging the hillsides leading into town. Many of the buildings of Ghazna had the appearance of Buddhist shrines; spoils from raids into India had been reused by the Ghaznavid princes. The town itself and its many markets lay in the plains, once protected by a fortified wall. The most visible landmarks are the great star-shaped brick minarets; once they stood proudly beside the city's mosques, but the mosques have long since disappeared.

Distinctly Islamic in style, too, were the remains of a magnificent palace of the Ghaznavid princes, which had been ex-

Colossal star-shaped minaret of a former mosque at Ghazna, with majestic calligraphy in brick (12th century).

cavated by Italians in 1957. The gleaming marble face of its courtyard facade, carved with poetic verse, bespoke the secular side of Islamic culture, a world in which the images of Heaven provide a model for creating the good life on Earth. The Ghaznavids built gardens with pavilions for the pleasure of the Sultan, both here and near Kandahar.

The most famous of the Ghaznavid sultans, Mahmud,

who died in 1030, was a colourful character. Best known as destroyer of the idols of India, he also exploited India as a source of elephants, building a stable in Ghazna that could house 1000 of them. He was the first Muslim ruler to introduce these animals into his arsenal, using them as tanks, which gave his armies a distinct advantage. Often portrayed riding an elephant, Sultan Mahmud is also known as the patron of poet Firdawsi—the Persian Shakespeare—who dedicated his versified history of Persia's kings, the *Shahnamah,* to Mahmud. Unfortunately, the Sultan was too much of a boor to appreciate the honour and failed to reward the poet adequately. Only later, coincidentally on the very day that Firdawsi died, did Mahmud realize his mistake and offer to fatten the purse.

By the 15th century, however, Ghazna's star had waned, and the Timurid monuments being built there seem provincial compared with the marble panels of Mahmud's palace.

972.10

Inkwell of the Tax Assessor: This rare bronze inkwell with silver and copper inlay portrays a seated man holding a bag (of coins) twice—once with compass, once writing. His titles given on the lid suggest he was a tax assessor *(mushrif)*, measuring land by triangulation (hence, the compass), recording the plots, and filling the purse. Made in Herat, second half of 12th century.

A Brisk Bronze Casting Business in Medieval Times

In 12th-century Afghanistan, a major art in bronze-casting developed, particularly in the country's western regions. A silver shortage loomed, and bronze was substituted, its status raised by intricate inlays of silver and red copper, such as those on a rare 12th-century inkwell made in Herat on view in the ROM's Islamic gallery. Even the more pedestrian bronze objects (as those on page 24), such as small crucibles for preparing indigo that was used for dyeing eyebrows and hair, or mortars and pestles for grinding herbs and spices, were engraved with fancy inscriptions wishing the owner prosperity and long life.

Herat

After Timur's death in 1405, the reins passed to his son Shah Rukh, who preferred to rule from Herat rather than Samarqand. I flew from Kabul to Herat, which is near the Iranian border and often was part of Iran until 1861. In Herat I found it easier to make myself understood than in other parts of Afghanistan. People in Herat would say that I spoke *farsi shirini* (sweet Persian), which was either a reference to my Iranian lilt or a kind way of saying that my language skills left room for improvement—reflecting the customary Persian hesitance to offend.

When Shah Rukh came to power and transferred the capital to Herat, he rebuilt the city and had a new bazaar constructed of fired brick to encourage commerce. The Chinese ambassador, visiting Herat in 1414, noted that its shops overflowed with goods from all over the world. Suburbs expanded, and Shah Rukh and his queen, Gawhar Shad, built splendid new mosques and madrasahs as befitted the imperial capital.

The madrasahs were real universities, not the armed training camps they have become in some regions of the Muslim world today. The schools taught theological sciences but also mathematics, astronomy, and medicine. They attracted the most eminent professors and provided scholarships to students. Their cloisters offered a quiet refuge from the clatter of the streets.

Herat became a centre of art and culture. Innovative architects from Iran created gravity-defying vaults, painted with gold and lapis, and tile-makers covered the walls of the new buildings inside and out with mosaic panels. For the court library, a royal academy of painters produced magnificent illustrated and illuminated books encompassing every genre of literature. Fountains bubbled in canals of running water and pleasure pavilions dotted the many fragrant gardens built by princes and aristocrats around the city. In these gardens, the "beautiful people" held parties, debating the merits of contemporary poetry and art. Babur, the future emperor of India, recorded his delight at visiting his Timurid cousins in Herat in 1506, just before the collapse of their dynasty.

Today, none of Shah Rukh's palaces remain. Most of his other buildings were built outside Herat's medieval walls and were largely destroyed during the late 19th-century Anglo-Russian war. But one solitary painted chamber, capped by a majestic fluted tiled dome, survived. It was the royal mausoleum that formed the corner room of Gawhar Shad's madrasah, and it gives us a good sense of how the palaces

might have looked, of their former magical grandeur. To me, the magnificent dome in this chamber appears to float on air. One of the minarets flanking the madrasah's portal also remains, and in 1966 you could still climb the narrow spiralling steps inside this chimney-like tower all the way to the top.

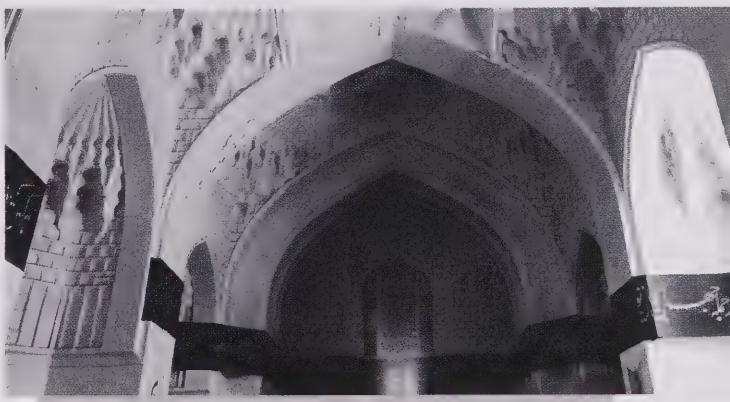
In much better shape was the shrine built by Shah Rukh to honour the tomb of Shaykh Abdullah Ansari in the village of Gazurgah, two kilometres northeast of Herat. At the time of Ansari's death in 1089, no building had been erected at his grave. I wondered why Shah Rukh decided in 1425 to build one. Was he motivated by piety or politics? Whatever his reasons, no expense was spared in the architecture. The shrine's facade of arcades is swathed in a textile-like pattern of glazed and unglazed bricks in turquoise, lapis blue, white, and black. A lovely vestibule was later decorated with paintings of Mecca and Medina in Arabia, the two holiest sites of Islam. Two long halls stretch to the left and right, gracefully vaulted with transverse arches and dripping with plaster stalactites. One hall was used as a mosque and the other for dervish gatherings. In the corners are tiny closet-like cells where a Sufi dervish (one who steeps himself in mystical religious thought) might retire for a 40-day vigil.

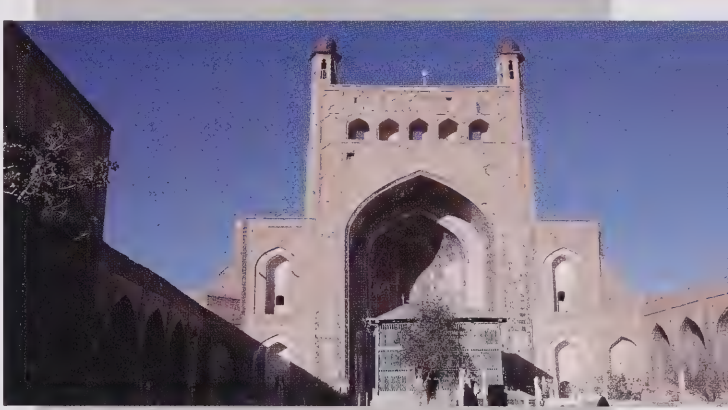
Really, the shrine is a *khanaqah*, or monastery, devoted to the Sufi teachings of Ansari, who was known for his piety and breadth of learning. Part of the building accommodates Sufis, but mostly it is a large cemetery, surrounded by arcades. In the whole complex there is no dome, only vaulted rooms and halls. I was surprised to discover that the shaykh's tomb lay in the courtyard, not inside a domed mausoleum like the one built by Gawhar Shad as part of her madrasah. This was an even better example of the phenomenon I had seen at Balkh. But here at Gazurgah, at last I found an explanation.

An inscription on the portal describes the building not as a *gunbad*, or domed mausoleum, but as a *hazirah*—an enclosure. Physically, that's what the building did—surround or *enclose* the tomb. I later found out that Islamic tradition actually prohibits burial under a domed roof because the tomb was meant to be open to the air. Domes were honorific structures that glorified the person sitting (or lying) under them. This is why they were so appropriate for rulers and not very appropriate for the pious. What we see at Gazurgah is a happy compromise—the sultan displaying his wealth in a way that would not offend the pious spirit of the shaykh. Scholars had long been aware of the widespread phenomenon of monumental tombs in the Islamic world, but no one had considered the alternative ways of commemorating an important burial site. Herat turned out to be full of *hazirahs*, according to medieval descriptions of the city, but they were much more modest than that of Ansari. Most had by 1966 disappeared.

In Herat, many fine buildings had survived from the later years of Timurid rule. It took nearly a month just to record them all. I had always hoped to return some day, but in 1978 the government of Afghanistan fell to a Soviet-sponsored coup. War followed and continues today.

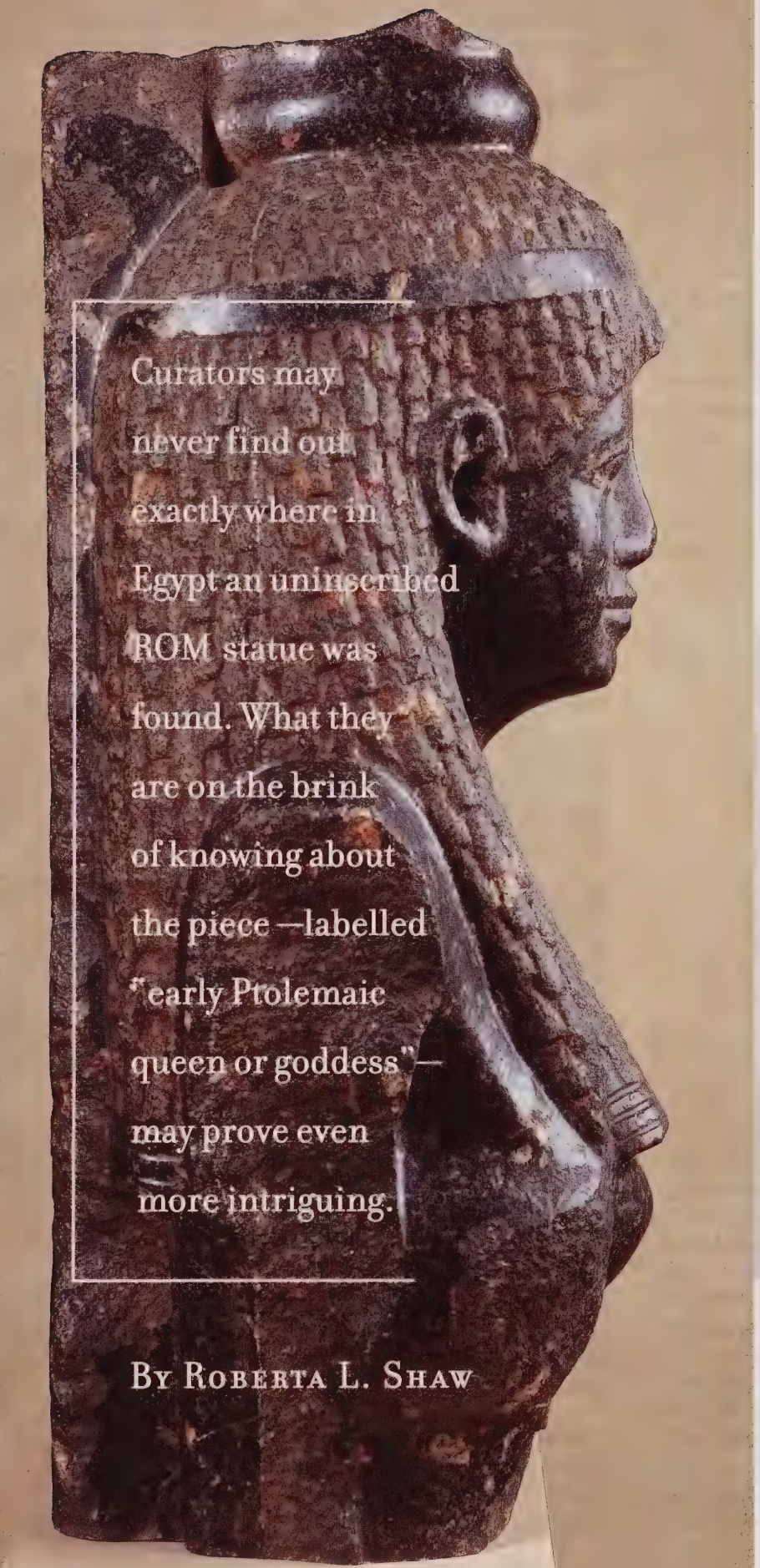
In its past, Afghanistan played host to the brilliant cultural achievements of many civilizations—Greco-Bactrian, Kushan, Ghaznavid, Timurid, Uzbek, Afghan—and I hope that something of this splendour will remain to awe future students as it did me when I first visited the country.





Top: Vaulted prayer hall in the shrine of Abdullah Ansari at Gazurgah. **Middle:** Dome "floating" on interlocking arches, interior of Gawhar Shad mausoleum, Herat, 1432. **Bottom:** The great *eyvan* (barrel-vaulted porch) behind the tomb of Abdullah Ansari at Gazurgah.

Timurid chronicles often use the quote: "Verily, our monuments will tell about us, so after we are gone look to our traces." Images, especially architecture, hold power. No one knows this better than those who seek to destroy them. ●



Curators may never find out exactly where in Egypt an uninscribed ROM statue was found. What they are on the brink of knowing about the piece—labelled "early Ptolemaic queen or goddess"—may prove even more intriguing.

By Roberta L. Shaw

BRIAN BOYLE, ROM

This is a story of serendipity.

Mixed in with my usual mail one day early in 2001 was a notice of a colloquium to be held in June, in conjunction with the British Museum's exhibition *Cleopatra of Egypt*. I was scheduled to guide a ROM tour through Egypt later that year, and Alexandria, Cleopatra's capital, was on the itinerary. Normally, Ptolemaic Egypt—a period when Egypt was ruled by a family of kings called Ptolemy, about 323 to 30 BC—is not my area of study; the series of talks would give me a good opportunity to catch up on the latest scholarship about the eternally fascinating Cleopatra before guiding the tour in Egypt.

While reading a review of the British Museum's exhibition a few weeks before the talks, a photograph caught my eye. It was of a female bust newly identified by British scholars as Cleopatra—technically Cleopatra VII, but besides specialists, few have heard of the six others who were wives or daughters of various Ptolemies throughout the almost 300 years of Ptolemaic rule. It is the seventh and final Cleopatra who has seized the public imagination because of her love of power and her dramatic life. Immediately signals went off in my head; I dashed into the ROM's Egyptian gallery to compare the photo with one of the busts there—actually the top half of a standing statue—which is simply labelled "early Ptolemaic queen or goddess." The ROM piece is not inscribed and nobody knows where in Egypt it was found. Still, my curiosity was piqued and I could, as a colleague once put it, "feel it in my little finger." Could this be *the* Cleopatra?

"Feeling it" doesn't prove it, of course, but very often that is the first clue that further investigation is warranted. Since my own expertise is in New Kingdom art (some 1000 years earlier), I needed the advice of an expert on Ptolemaic sculpture. Dr. Sally-Ann Ashton of the Petrie Museum of Archaeology in London, who contributed the chapter "Identifying the Egyptian-style Ptolemaic Queens" to the exhibition's catalogue, was lecturing at the colloquium. At the first coffee-break, I managed to corner her with photos of the ROM piece. Her response gave me hope: she, too, thought the sculpture could be an image of Cleopatra.

CLEOPATRA OF TORONTO

Below: Fragment of a sculpture from Fouah in the Nile Delta. Height: 53 cm (1.7 feet). **Right:** Image from the bark shrine at Koptos shows Cleopatra VII making an offering to the deities. This photograph was taken by Sir William Matthew Flinders Petrie during his excavations of the area; the shrine no longer exists.

SALLY-ANN ASHTON. REPRODUCED WITH PERMISSION OF THE GRECO-ROMAN MUSEUM

Sculpture from Fouah, Egypt, now in the Greco-Roman Museum, Alexandria.

COPYRIGHT PETRIE MUSEUM OF EGYPTIAN ARCHAEOLOGY, UCL.

Cleopatra VII, the Egyptian queen we were trying to identify in sculpture, lived from 69 to 30 BC, the last monarch of a family dynasty that had ruled Egypt for three centuries. The dynasty's founder, Ptolemy I, was a Macedonian marshall who inherited the kingdom after the death of Alexander the Great. At its apogee around 270 BC, Ptolemaic Egypt ruled over most of the eastern Mediterranean. By 51 BC, when Cleopatra ascended the throne, Egypt had lost most of its territories and was decidedly under the control of Rome.

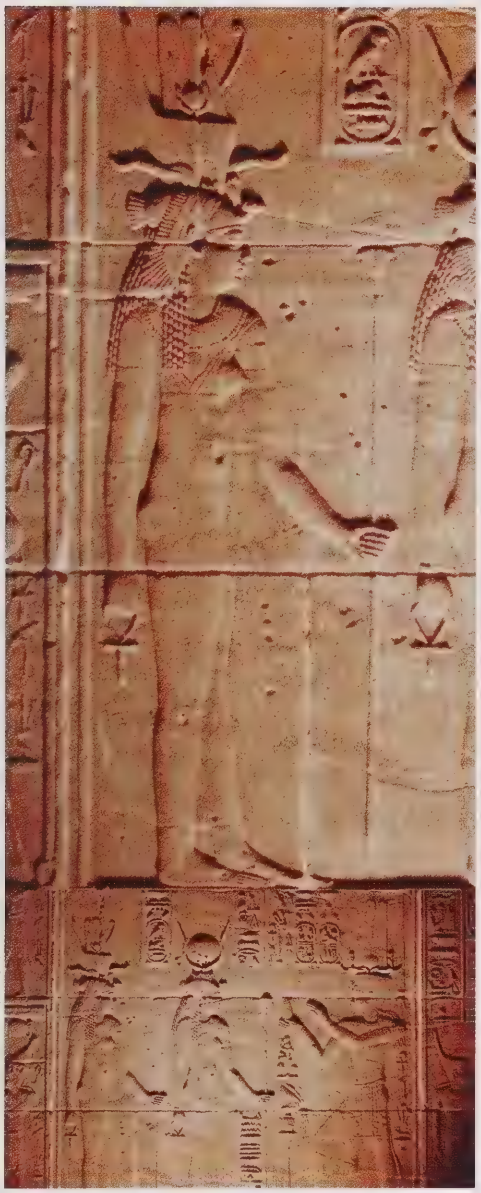
At 17 years old, Cleopatra and her 10-year-old brother, Ptolemy XIII, inherited the throne from their father Ptolemy XII. The young queen was married to her brother, a tradition from earliest pharaonic times. It is doubtful that the marriage was consummated because Cleopatra soon seized power, which resulted in a three-year-long civil war. She was able to enlist the support of Julius Caesar who had entered Egypt for his own purposes (in pursuit of his rival, Pompey the Great). Cleopatra immediately became sexually partnered with the triumphant Caesar and Ptolemy XIII was killed in a decisive battle.

Cleopatra was then married to her next brother, who was eleven years old. No doubt it was another unconsummated marriage. Six months later (in June of 47 BC), Cleopatra gave birth to Caesar's son, Caesarion. The baby, Cleopatra, and Ptolemy

XIV were taken to Rome as guests of Caesar. But two years later, Caesar himself fell to assassins and Cleopatra and her family left Rome shortly afterward. Within a month of returning to Egypt, Ptolemy XIV was dead, and five-year-old Caesarion was elevated to share the throne with his mother.

By the autumn of 42 BC, power in the Mediterranean world was divided between an alliance of two men: Octavian held control of the west and Mark Antony, the east. In 41 BC, Antony conducted a grand tour of the eastern lands to impose Roman order. He summoned Cleopatra to Tarsus and thus began one of the most famous love affairs in history. In customary Ptolemaic fashion, the political deal between Antony and Cleopatra involved the arranged murder of Cleopatra's sister, Arsinoe, to ensure there would be no further plots to overthrow Cleopatra's rule, giving Cleopatra full control of her country.

Antony returned with Cleopatra to Egypt and they had three children—twins (boy and girl) born in 40 BC and another boy in 36 BC. By this time, the alliance between Octavian and Antony was steadily breaking down. Matters came to a head in 31 BC, and Antony and Cleopatra were defeated in the famous Battle of Actium (in Greece), which established Octavian as supreme ruler of the Mediterranean. The ill-fated lovers fled home to Alexandria from where Cleopatra made every effort to salvage her navy and forge an alliance with India. That plan was



COPYRIGHT SALLY-ANN ASHTON

Left: Relief from the Temple of Isis at Philae showing Arsinoe II wearing the crown designed specifically for her and which was worn by her in all her representations.

PORTRAITS OF CLEOPATRA

The portraits of Cleopatra that appear on her coins follow the typical Hellenistic tradition of depicting monarchs without much flattery. Two coins in the ROM's collection contain portraits of Cleopatra.

On the right, the bronze Cleopatra coin struck at Alexandria was worth 80 drachmas. She is portrayed in profile with her hair arranged in the so-called melon style and drawn back into a chignon at the back of the head. The simple royal diadem favoured by the Ptolemaic kings sits on her head. Long after her death, Cleopatra's bronze coins were kept in circulation in Egypt and are therefore now usually worn from handling.

The coin on the left is a debased silver tetradrachm dating to about 37–32 BC, struck in one of Cleopatra's territories outside Egypt, possibly Askalon, north of Gaza. While her hairstyle in this image is the same, the melon arrangement framing her face is more pronounced and corkscrew curls can be seen behind her ear. In contrast to the simple drapery around her shoulders on the bronze coin, in this portrait she is wearing a jewelled brooch and two pearl necklaces. Her prominent nose is more hooked than on the coin struck at Alexandria.

BRIAN BOYLE, ROM / LEFT: 949X162.3, RIGHT: 949X15.773

sabotaged by the Nabataeans—builders of the unique city of Petra in Jordan—who burned her ships at the instigation of Octavian.

Perhaps because Antony and Cleopatra's final chapter reads a little like that of Romeo and Juliet, they remain firmly entrenched in our imaginations. When Octavian entered Alexandria, rumour spread to Antony that Cleopatra had killed herself. In response, Antony fell on his sword, but rebiographer Plutarch says, "the truth about the manner of her death no one knows." Her attendants, Iris and Charmion, died with her. Caesarion was executed and Cleopatra's three children by Antony were taken to Numidia (modern Algiers), where her daughter was married to King Juba II. Nothing more is known of them.

By all accounts, Cleopatra was an intelligent and able ruler, respected by her subjects. She spoke seven languages, including native Egyptian, which none of her predecessors had bothered to learn, as Greek was the language of the court. She manoeuvred her relations with Rome to her country's best advantage—until her disastrous, but unavoidable, liaison with Mark Antony, which ended her dynasty and her country's independence. Scholars agree that no Egyptian mained alive long enough to learn that the news was false. He was brought to Cleopatra and died in her arms. Later, she was captured by Octavian and probably "encouraged" to commit suicide, though she was allowed to visit Antony's grave first. She was 39 years old when she died.

Tradition claims that Cleopatra held a poisonous snake to her breast, but as Greek

IDENTIFYING THE ROM'S "CLEOPATRA"

In 1960, eminent Egyptologist Bernard Von Bothmer of the Brooklyn Museum (now the Brooklyn Museum of Art) was the first to assign a date to the ROM's statue—he dated it to 240–200 BC. He based this date on the statue's rounded facial features typical of early Ptolemaic royal sculpture. Yet, discrepancies existed between the ROM's piece and other images from the period. Most notably, the crown, which is now missing, was supported by a back pillar and was carved from the same block of stone as the statue (you can still see traces of it). Usually, in this period, the crown was a separate piece.

Twenty years after Bothmer published this date, Robert S. Bianchi, also of the Brooklyn Museum, suggested the style of the ROM's sculpture had more in common with royal and divine representations of queens from the 2nd century BC, putting the date somewhere between 200 and 100 BC.

Who was correct—Bothmer or Bianchi? To determine the true date for the ROM sculpture, its anomalies provided our best clues—the unusual extended back pillar with crown and the rounded portrait features, which on closer examination echo but do not exactly match those of the early Ptolemaic period.

The facial features to which Bothmer referred are certainly evident when the sculpture is viewed face-on; the face looks rounded with a broad nose and cheeks. In profile, though, the face appears flat and almost angular, a feature typical of Roman-era copies of Ptolemaic sculpture. The pronounced modelling around the eyes of the ROM's statue is also typical of Roman-period sculpture and can be found on numerous sphinxes and portraits of the emperor as pharaoh.

The ROM piece is certain to be an ancient copy of an even earlier image, but distinct from the original because of its unusual features and the way it was manufactured. However, by looking at the ROM statue within the sequence of other Ptolemaic royal representations, the ROM's sculpture fits better in the Ptolemaic tradition (323 BC to 30 BC) than the Roman (30 BC to 138 AD), though later in the Ptolemaic period than either Bothmer or Bianchi suggested. Could the phenomenon of copying 3rd-century BC images have started in the Ptolemaic rather than the later Roman period as had always been thought?

Research undertaken for the British Museum's *Cleopatra of Egypt* exhibition suggests this is very possible. Scholars have discovered that Cleopatra had a policy of associating herself with Arsinoe II—an earlier queen who ruled Egypt with her brother in the more prosperous 3rd century BC and who remained a popular goddess into the Roman period. Cleopatra's policy included copying the sculptures of Arsinoe's day. It is not surprising then that some earlier-style features found their way into the Romano-Egyptian repertoire of Cleopatra's time, which also ex-

ruler could have saved Egypt from the might of Rome; it was simply a matter of time.

THE ROAD TO ESTABLISHING whether the ROM's statue might be of this larger-than-life queen has not been smooth. Without a provenance—knowing where the statue came from—or inscription, we are left solely with art historical analysis, an avenue of study that has never claimed to be indisputable. But with no hard science to give us an answer, our next best strategy is to rely on the scholars whose research focuses narrowly and expertly on a particular topic—in this case, the Ptolemaic/Roman Egyptianizing style of sculpture.

Such scholars carefully study every known existing artifact—the time-honoured "contrast and compare" method—to establish a body of work that can be put into chronological development. Firmly identified pieces provide a basis for assigning dates to questionable ones. Virtually identical workmanship can be assumed to be of the same style, date, school, or even artist. Still, there are difficulties in identifying any sculpture. First, very often the similarities of workmanship are inexact. A century or two can rest on such detail as a concave plane of the neckline!

Popular legend and Hollywood movies hold that Cleopatra VII was a beauty. Was she really? (We all want her to be, of course.) To date, there is no consensus on Cleopatra's looks, which points to another key problem with identifying the sculptures. The only images that can be ascribed to her with certainty are those on her coins. The problem is that ancient coinage portraits, which show only profiles, are highly stylized, and the trademark motif.

IVOR PRIDDEN, COPYRIGHT PETRIE MUSEUM OF EGYPTIAN ARCHAEOLOGY, UCL

Limestone crown excavated by Petrie at Koptos. The crown shows the general type worn by Ptolemaic queens, with the exception of the triple cobras, which is Cleopatra's

Height: 52 cm (1.7 feet).

plains why scholars have struggled to place the ROM's piece.

Further clues about the sculpture's date and connections come from examining the unusual back pillar. In themselves, back pillars are a defining feature of Egyptian sculpture. Typically, though, the pillar extended beyond the statue's head only in colossal statues to support the headdress. The ROM's sculpture is smaller than life-size.

Only two other known pieces of this small scale from the Ptolemaic period have this unusual extended pillar. One of them is an inscribed limestone crown (on which the pillar can clearly be seen going up through the crown's back) in the Petrie Museum of Egyptian Archaeology, University College, London. The fragment of what once would have been a complete statue, it was found by Sir William Matthew Flinders Petrie, the college's first professor of Egyptology, during excavations of a temple dedicated to the Egyptian god Min at Koptos. Initially, the crown was identified as part of a statue of Arsinoe II—sister and wife of Ptolemy II (marriage to a sibling was a tradition from earliest pharaonic times)—on account of the titles inscribed on the back of the crown, which read, "king's sister, king's daughter, great royal wife."

Recently, the crown has been associated instead with another structure also dedicated to Min at the Koptos temple: a bark shrine, or small shrine where a public procession carrying an image of a god in his or her sacred bark (boat) would rest. Inscriptions and relief decoration show that this shrine was dedicated by Cleopatra and one of her brothers, probably Ptolemy XIV. But there were also earlier building works at the temple and it was thought at first that the Petrie Museum crown belonged to the earlier period.

Evidence does exist, however, for the Petrie crown's connection with Cleopatra—she is depicted wearing

continued on page 38

ruler's appearance can differ greatly depending on the coin's condition, date, place of issue, and quality of workmanship. The coins are not as precise as those of today.

Only 10 coins from Cleopatra's reign are in good condition and on those her looks vary—a few even show her and Mark Antony looking remarkably alike! For the most part, though, she is shown with a large, slightly aquiline nose with flaring nostrils and a strong chin.

those bearing her name. There are, however, two or three uninscribed sculptures that do compare favourably with the coins and have gained wide acceptance among scholars as images of Cleopatra.

These sculptures certainly portray her as attractive, but not breathtakingly beautiful by present-day taste. Indeed, several ancient accounts describe her as good looking, but emphasize that her real seductive power

the same type of crown, featuring plumes and a sun disk, on the shrine's wall reliefs. Researchers originally thought that the crown was associated with Arsinoe II because there is more than one cobra on the headdress, but we know now that this type of crown was not worn by Arsinoe II. The Petrie crown's sun disk is also decorated with three royal cobras—Cleopatra's signature motif.

Traditionally, Ptolemaic queens identified themselves as royalty with a single cobra on their crown or headdress, but Arsinoe had chosen to wear two. It's possible that Cleopatra chose three cobras for her own headdresses to distinguish herself from the other Ptolemaic queens and to reinforce the association with Arsinoe. Arsinoe's popularity as a historical figure, her power as a queen—although she had ruled with her brother—and her position as perhaps one of the most important goddesses of the dynasty likely prompted Cleopatra to choose her as a role model.

So it's likely, then, that the Toronto statue, which shares the unusual pillar and crown with the Petrie piece, is also linked to the 1st century BC and to Cleopatra herself. But when, during Cleopatra's almost 22-year reign might it have been made?

The inscriptions at Koptos indicate that Cleopatra VII was ruling with one of her brothers when they dedicated the bark shrine, and the inscription on the back pillar of the Petrie Museum's crown describes the queen as "king's sister and king's wife." The crown surely dates to the shrine's dedication at Koptos, which probably took place during Cleopatra's reign with her younger brother, Ptolemy XIV, sometime in the six months before the birth of her son by Julius Caesar on June 23, 47 BC. The male ruler on the reliefs is unlikely to be Ptolemy XIII because of Cleopatra's prominent role on the reliefs; their joint rule was marked almost immediately by civil strife, making it unlikely they would have jointly dedicated a civic monument. Following Cleopatra's return to Egypt from Rome in 44

SALLYANN ASHTON. REPRODUCED WITH PERMISSION OF THE GRECO-ROMAN MUSEUM, ALEXANDRIA

A crown from a colossal statue of an early Cleopatra, possibly Cleopatra II or III, which was salvaged from the harbour at Alexandria by a French team led by Prof. Jean-Yves Empereur. It is a fragment of a larger statue that was found in 1960. The back pillar of this statue supports the crown.

Still, even with their flaws, coins offer the most accurate images of Cleopatra. To determine the authenticity of three-dimensional sculptures thought to represent the queen, experts compare the sculptures to the coin portraits. Among scholars, sculptures purported to represent Cleopatra are hotly debated, as very few Ptolemaic royal statues are inscribed, and some doubt surrounds even

lay in her sweet voice, sharp wit, and spell-binding charm. Add to this the most luxurious costumes in silks, gold, jewels—and she must have been stunning. As 1st-century Greek biographer Plutarch says, "she was not a woman to spin wool and keep a house."

The accepted sculptures of Cleopatra are carved in the classical style. The ROM's piece is completely in the earlier, Egyptian tradi-

tion, which idealized its subjects rather than portraying their true likenesses. While this clearly poses another difficulty in identifying the sculpture as Cleopatra, it does not discount this as a possible image of the queen. The traditional style continued to be used in Egypt for royal sculpture into Cleopatra's time. The rule of thumb is that the more Egyptian the piece, the more likely the portrait is a completely idealized version.

The ROM's sculpture, then, if it is of Cleopatra VII, is not likely an accurate portrayal of her appearance. But evidence is mounting (see "Identifying the ROM's Cleopatra," page 36) that it is nevertheless a depiction of the famous queen.

Memories of Cleopatra did not die with the queen. A high official, Archibius, paid Octavian a huge sum of money to leave her statues intact. Some 400 years later an inscription made by an official in the Temple of Isis, the goddess with whom Cleopatra was associated, states that he "covered the figure of Cleopatra with gold."

Sally-Ann and I hope to reveal whether the ROM's piece is one of those very sculptures preserved by Archibius's bribe. Sally-Ann's evidence establishing the ROM piece as Cleopatra is compelling. But if the ROM's sculpture cannot be absolutely established as Cleopatra or even if it is Cleopatra but the likeness is unrealistic, one might wonder what all the fuss is about. Perhaps it's that the allure of wondering is in itself a kind of end. Look again at the piece next time you visit the ROM's Egyptian gallery. I think you will agree with

BC, she was already ruling with her son, Caesarion-Ptolemy.

Of the surviving statues of Cleopatra, the Petrie Museum's crown is early in the sequence—it may even have been the first on which Cleopatra used the triple cobra as a motif. In form, the ROM and Petrie sculptures are the same; both have the crown carved from the same block of stone as the statue, while later Cleopatra statues, those that have the triple cobras, do not have a crown at all.

The ROM statue may thus be a missing link—a very early representation of the queen, at a time before she had adopted the three cobras, perhaps during her early reign with Ptolemy XIII (51 to 47 BC). Like the ROM's statue, there is another missing link that has recently been discovered to share features with the Petrie crown. A fragment of a statue from Fouah in Egypt and now housed in the Greco-Roman Museum, Alexandria—the piece to which Bothmer originally compared the ROM's piece—is the only other piece to share the unusual back pillar and crown. It is the piece that caught Roberta's attention.

Like the ROM statue, the Alexandrian one has a single cobra. This image had previously been dated to the Roman period and was thought to be a depiction of Isis on account of the costume. But the back pillar and crown suggest its connection to Cleopatra. We know from an inscription on a stela in the Louvre that Cleopatra called herself a goddess from the first year of her reign. The only difference between this sculpture and the ROM's is that the Alexandrian piece depicts the queen as a goddess, with a Greek-style wig and her garment knotted between the breasts, while the ROM's is in the traditional Egyptian style. From inscribed examples we also know that this earlier, purely Egyptian, style of sculpture continued to be used into Cleopatra's day to represent the queen in her traditional role as consort to the ruling pharaoh even though, at the same time, the newer type of image depicting the queen as a living goddess was also being produced.

Together, the ROM and the Alexandrian statues likely show us the earliest representations of Cleopatra in her two roles: queen and goddess of Egypt. The facial features, although stylized on both images, reveal a youthful face appropriate for the 18-year-old they would have represented.

As a copy of the earlier image of a more fortunate queen, the ROM's Cleopatra sculpture reveals an awareness of earlier queens and illustrates a desire to be associated with a more prosperous period of Egyptian history. Only the stylized nature—the flatness viewed in profile—betrays its later date. But the sculpture has revealed something more about Cleopatra. Effectively, it is a 1st century BC copy of a 3rd century BC statue. The phenomenon of copying earlier sculptures was previously thought to have begun at least 50 years later, in the Imperial Roman period. The ROM sculpture shows that this practice was begun earlier, and if our clues are correct, by Cleopatra herself.

By Sally-Ann Ashton

Below: Granite sphinx dating from the late 1st to 2nd centuries AD shows the more general facial features that commonly appeared at this time on statuary rather than a recognizable "portrait" of the ruler. These statues appear to be copies of earlier Dynastic and Ptolemaic material.

SALLY-ANN ASHTON. REPRODUCED WITH PERMISSION OF THE GRECO-ROMAN MUSEUM, ALEXANDRIA

Egyptologist Bernard Von Bothmer that, although "the expression is dry, bland, non-committal and still, the longer one looks at the face in varying light, the more one has the impression that something distinctly personal is expressed in the features. There is a mystery in the face."

Whether or not we accept this sculpture as a portrait of Cleopatra—and the Ptolemaic experts, as you read this, will be weighing the evidence for themselves—the mere possibility that it could be her affects one's perception of it. I have looked at the sculpture many times over the past few months and this is what I see now that I didn't see before—a very young, wistful queen who has just received the mantle of rule over her people and thereby been elevated to the pantheon of Egyptian goddesses. Although the expression does not reveal the life writ large that was to come, one can imagine that she knows full well that her power will not be easily maintained, that outside forces will have to be leashed and cajoled, that inside opposition will have to be ruthlessly eradicated, and that her personal passions will be compromised accordingly. Even then, could she hear the tramp of Roman legions that would curtail her short life and bring an end to pharaonic Egypt, one of the grandest historic traditions ever conceived? Very much romantic speculation, I admit, but who can resist? ●

By all accounts, Cleopatra was an intelligent and able ruler, respected by her subjects. She spoke seven languages, including native Egyptian, which none of her predecessors had bothered to learn, as Greek was the language of the court.

Traces of Trilobites

Ancient life is best known to us through fossils that preserve actual body parts. Much less common are fossils that capture more fleeting aspects of ancient creatures' one-time presence on the Earth.

Dear ROM:

I am in need of some help in identifying a fossil that I collected while on vacation this year. It was found on the eastern side of Georgian Bay (Ontario). My friends and I were wondering if it might be a turtle?

Thank you.

Mary-Lou Hopson

Dear Mary-Lou:

Thank you very much for alerting us to your discovery, which is not (fortunately or unfortunately, depending on your point of view!) a fossil turtle.

Your strange object is a superb example of a "trace fossil" known by the impressive formal name *Rusophycus polonicus*. Trace fossils, unlike more typical "body fossils," are not the remains of anatomical components (bones, teeth, or hard shells) of ancient organisms, but instead preserve some other aspect of their presence, most often some form of activity. The most familiar examples of trace fossils—and among the easiest to interpret—are footprints left by large, extinct land-dwelling animals. It is fairly easy to visualize a dinosaur from a trail of foot-shaped indentations left behind in what would have been firm mud 100 million years ago. When these traces are quickly covered by another layer of mud or sand, they are effectively "locked away" for posterity. Even when no physical remains, such as bones or teeth, are found with it, the preserved trackway in itself is ample evidence of the former presence and activity of the animal.

With your specimen, however, the interpretation is not quite so straightforward. The fossil comes from a sequence of rocks that formed

DAVID RUDKIN

Top left: Mary-Lou's *Rusophycus polonicus* specimen. **Top right:** An Ontario specimen of the trilobite *Isotelus maximus*, the type of trilobite that produced the *Rusophycus* trace fossil. **Bottom:** A model of *Isotelus* digging in the sand.

DAVID RUDKIN, ROM

EMERGENCY CONVERSATION STARTER

Did you know Roman statues were made with detachable heads?

We do whatever it takes to help make your party a success: marvellous food, impeccable service, and more.

à la Carte KITCHEN INC.

416.971.4068 www.alacartekitchen.com

CLASSICAL 96.3 fm

Making life sound better.

from layers of mud, silt, and limey sand deposited at the bottom of a tropical inland sea near the end of the Ordovician Period, about 445 million years ago. That was long before there were turtles, dinosaurs, or any other four-legged vertebrate animals.

Your trace, in fact, is the cast (infilling) of a shallow depression excavated in the muddy Ordovician sea floor by a multi-legged invertebrate animal called a trilobite. Trilobites are extinct relatives of such familiar modern arthropods as lobsters and horseshoe crabs. Pieces of hard, mineralized trilobite exoskeleton (the outer body covering) are fairly common fossils in the Georgian Bay Formation.

Several different kinds of trilobite trace fossils are also known from these rocks, but *Rusophycus polonicus* is the least common and by far the most impressive. Because it is quite large and shows impressions of some of the features of the underside of the exoskeleton, we know that *Rusophycus polonicus* was produced by a large trilobite called *Isotelus maximus*.

More importantly, in addition to showing an imprint of the underside of the trilobite exoskeleton, your specimen clearly reveals impressions of the unmineralized legs, a feature that is seldom seen on such fossils. This makes it particularly useful in helping to understand the soft anatomy of *Isotelus*, and in figuring out how the animals used their multiple leg pairs to excavate these peculiar oval traces.

Unfortunately, we still don't know the function of the curious excavations. Were they for hiding from large predators? Were they temporary shelters during times of environmental stress? Or were they constructed as nests, in which the trilobite deposited its eggs? Even though the "what" part has been solved, the "why" remains a mystery.

The ROM wishes to thank Ms. Hopson who has kindly lent her specimen for study.

David Rudkin is an assistant curator in the Museum's Department of Palaeobiology.

Atlantis, Astronomy, Aromatherapy

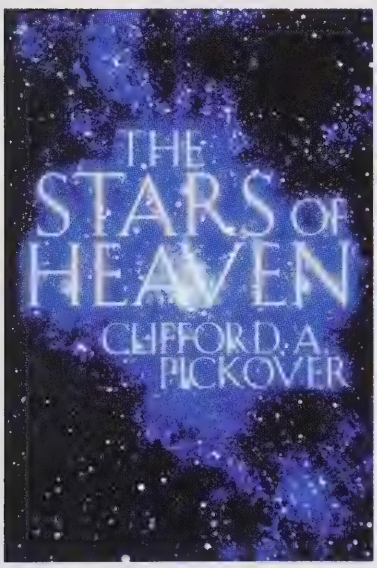
FEATURE REVIEW

The Stars of Heaven

By Clifford A. Pickover
(Oxford, Cloth: $44)

"Unknowingly, we plow the dust of stars, blown about us by the wind, and drink the universe in a glass of rain."
—Ihab Hassan, The Right Promethean Fire

"Joan was quizzical, studied metaphysical science in the home."
—Lennon and McCartney, Maxwell's Silver Hammer



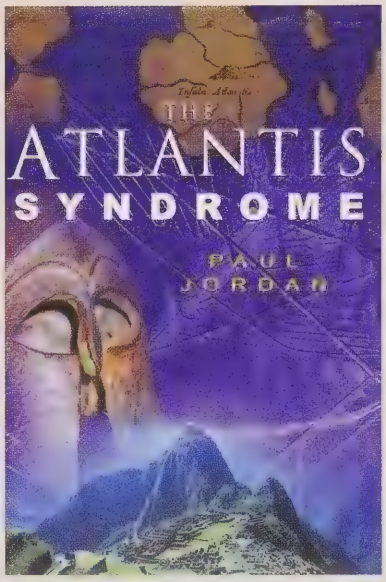
This starstream of consciousness ranges from the origins of the cosmos and stellar evolution through metaphysics, human intelligence, art, science fiction, and time travel, to galactic cannibalism, the paradox of the sun's hot corona, and how to save the Earth, (or at least add six billion years to its life. On this, a team of scientists at the University of California at Santa Cruz have in fact mapped out a plan). Along the way, Pickover's pastiche informs us, among other things, that "the calcium in our bones was first created in furnaces located in the centre of stars," and that the relative positions of the stars and moon in van Gogh's *Starry*

The Atlantis Syndrome

By Paul Jordan (Oxford, Cloth: $47.95)

"One could still recognize the massive character of Tuscan architecture . . . the high base of an acropolis, with the floating outline of a Parthenon . . . a perfect Pompeii beneath the waves."
—Jules Verne, Twenty Thousand Leagues Under the Sea, 1870

"Who shall say that one hundred years from now the great museums of the world may not be adorned with gems, statues, arms, and implements from Atlantis, while the libraries of the world shall contain translations of its inscriptions?"
—Ignatius Donnelly, Atlantis: The Antediluvian World, 1882



Athens of the Atlantic, the great oceanic metropolis of Atlantis persists in the human psyche, its magnificent edifices lost to memory, if not to imagination. The French composer Debussy once wrote a piano prelude, *La Cathédrale Engloutie,* based on the legend of the vanished village of Ys, swallowed by the sea on account of its wicked parishioners, and the Atlantological literature begins with a similar moralistic account, by Plato, from c. 360 BC. In the pre-*Alvin* seascape of Jules Verne, Captain Nemo's *Nautilus* glides through the streets of Atlantis like a sub-marine gondola. Archaeologist Jordan, who has lectured in Archaeology and Anthropology at Cambridge University, chronicles the history of the fabled super city into the 21st century, leaving no barnacle unturned.

The definitive guide to Atlantis.

COMPILED AND REVIEWED BY GLEN ELLIS

Night, as rendered by the artist from the window of an insane asylum, are precisely accurate.

Sacred Luxuries Fragrance, Aromatherapy, and Cosmetics in Ancient Egypt

By Lise Manniche
(Cornell University Press, Cloth: $61.95)

In 1905, Charles Trick Currelly, the first director of the Royal Ontario Museum of Archaeology, commissioned a plaster cast of the Punt Wall from the Temple of Hatshepsut at Deir al-Bahri. In the time elapsed between Egypt's 18th Dynasty and then, fragments of the original wall had been spirited away by vandals. In the 20th century the deconstruction of the wall continued. The ROM copy freezes the wall in time, preserving imagery now lost from the original.

The wall commemorates an expedition to the Land of Punt, somewhere to the south of ancient Egypt, probably near present-day Somalia. Its depiction of the queen of Punt, a rival in beauty to Hatshepsut, as more than obese—rolls of fat drooping over her ankles—was likely designed to please the queen of upper and lower Egypt. Good looks mattered. Among Egypt's earliest known artifacts are items associated with cosmetics. The concept of glamour permeated elite society and beyond, beauty being attached to love and birth.

Sacred Luxuries explores every facet of ancient Egyptian cosmetics, fragrance, and aromatherapy, textually and pictorially, emphasizing the connections between sexual allure, fecundity, and the perpetuation of life, ultimately beyond life. In the process, Manniche, a professor of Egyptology at the University of Copenhagen, elucidates the erotic symbolism of Egyptian art and its connection to rebirth, the force of life continuous and cosmic.

(See also Roberta Shaw's "They Walked in Beauty," in *Rotunda*, Volume 32, Number 1, Summer 1999. This article is available at the ROM Web site, www.rom.on.ca).

Glen Ellis is head of Publications, Royal Ontario Museum.

The Honourable Henry N. R. Jackman Collection of Toy Soldiers in the Royal Ontario Museum

K. Corey Keeble
(ROM, Cloth: $75)

The largest and finest collection of toy soldiers ever offered to a Canadian public institution was donated to the Royal Ontario Museum in 1991 by the Honourable Henry N. R. Jackman. The collection consists principally of lead-alloy figures made by the English firm of Britains between 1893 and 1966, with miscellaneous figures from makers such as Mignot, Heyde, Johillco, Crescent, and Cherilea.

In addition to British regiments, the Royal Navy, Royal Marines, and Royal Air Force, the collection documents the British Empire, the Commonwealth of Nations, and a truly international representation of other countries. ROM curator K. Corey Keeble's study includes a comprehensive catalogue of the Jackman collection illustrated by more than 2000 full-colour photographs of the figures, as well as tanks, cannons, wagons, trucks, motorcycles, and the royal coronation coach of Elizabeth II.

A must for any collector of toy soldiers, this handsome and authoritative coffee-table volume is sure to become a classic and a collector's item in itself.

More Than Keeping Cool: Chinese Fans and Fan Paintings

Ka Bo Tsang
(ROM, Deluxe Paper: $49.95)

"The Milky Way is bright; what night can tonight be? / Rising up to the sky are a single wild duck and a solitary crane. / When the lonely orchids bloom, the azure clouds scatter. / A beauty sits alone . . ."

Yuan Mei, 1716–1798

Among the Royal Ontario Museum's fabulous Chinese holdings is a collection of exquisitely painted fans, currently on exhibit. Many of these precious artifacts were donated by one of the Museum's earliest patrons, Mrs. H. D. Warren. (In a well-known archival photograph, republished in the new edition of the Museum's souvenir/keepsake book, *Worlds to Explore*, ROM, 2001, Mrs. Warren and other prominent ROM benefactors are shown at the Great Pyramid of Khufu, c. 1909). The

fans are the "canvasses" of four centuries of artists who illustrated evocative Chinese poetry. The paintings conjure a landscape of mists, wisteria, irises, and orchids. ROM curator Ka Bo Tsang illuminates this stunning collection, paying special attention to the paintings' auspicious symbolism.

Shedding Better Light on Ancient objects

Ultraviolet rays help conservators to see beyond the ordinarily visible.

954.117 / M. WEBB, ROM

954.117 / CONSERVATION ARCHIVES

Left: The ROM's long-case clock under ultraviolet light. The bright patches below the hood indicate remaining restoration varnish after the first stage of removal. **Right:** The long-case clock under normal light.

MARIANNE WEBB

Museum conservators are often consulted to examine objects not only for conservation purposes but to determine whether the objects should travel for exhibitions or how they should best be displayed. For these thorough examinations, light is critical. To see objects better, conservators use light sources such as daylight and colour-corrected fluorescent lamps, but one of the most useful is specialized lighting with wavelengths that are invisible to the naked eye.

These invisible light sources, ultraviolet and infra-red, are found at either end of the light spectrum. Both are effective for examining objects, although ultraviolet is used most often. With its shorter wavelength, ultraviolet light contains more energy than does visible light. And most importantly, it causes fluorescence and phosphorescence in some substances.

When a material absorbs the invisible light's energy and then gives it off again—or glows—the effect is called fluorescence. The ROM's Inco Dynamic

FULL SERVICE
Gourmet Cuisine
CATERING
www.gourmetcuisine.com
We Foster Excellence in Creative Menu Development.
We provide Superior Food Quality and Exceptional Customer Service.
All of this combined in Cookery Create an Essential Harmony and Contemplative Pleasure.
At the ROM... we're their Caterer and your Caterer.
"It's Simply the Celebration of Food!"
Deborah Macfie
Director of Sales
416.461.5890
sales@gourmetcuisine.com

Earth Gallery displays fluorescent minerals that demonstrate this phenomenon. With phosphorescence, glowing continues even after the light source is removed—just as with those glow-in-the-dark stars for your ceiling.

Many materials used to create artifacts fluoresce under ultraviolet light, including most varnishes. A newly varnished painting will have a smooth, even, green to yellow glow. Any changes made later, such as retouching, would appear as dark patches under ultraviolet light. Any later attempt to remove the varnish, too, would appear as a dark patch.

Ultraviolet light, then, is a good tool for determining changes that have taken place since a painting was first created. However, if an older painting had a smooth, even glow, one might be suspicious. Normal wear that occurs over time has an uneven patchy appearance. A smooth glow on an older piece might indicate recent restoration and revarnishing. An old trick of restorers is to use a highly fluorescing varnish to hide recent repairs from knowledgeable eyes. False patinas, too, can be applied to objects that are not normally varnished to make them appear older, and often these can be detected by a fluorescence that should not be there at all.

Different substances may fluoresce in different colours. Most natural resin varnishes glow yellow or green, but a new coat of shellac fluoresces a bright orange colour. Unfortunately, though, older coatings are harder to distinguish. As shellac ages, its fluorescence changes to the more usual yellow-green colour.

In the Conservation Department, we use several lamps for observing objects and taking photographs under ultraviolet light. This type of light is particularly useful as a guide during treatment of artifacts. Several years ago, an 18th-century long-case clock underwent conservation treatment in the Decorative Arts Lab. A later varnish had been applied over the original varnish at some point and it was beginning to delaminate, or detach. This created unsightly dull grey patches.

957.242.2 / DIANE MCKAY

Portrait of Susannah Franklin under ultraviolet light. The dark patches in the lower area are evidence of varnish-removal tests.

In consultation with the curator, I decided it was best to remove the later varnish entirely. I used ultraviolet light to observe my progress. In the photograph at left on the previous page, the small patches of remaining later varnish glow brightly, whereas the original surface has a dull appearance.

If you want to use this method of examination at home, small hand-held ultraviolet lamps can be purchased from stamp-collecting shops; stamp collectors use them to see invisible ink marks. It is critical, though, that you take the proper precautions. Since ultraviolet light is very high energy but cannot be readily seen, it can quickly damage an art object—not to mention your eyes—if used improperly. Never look directly at the lamp, only at the surface of an object under the light. Ultraviolet light is more powerful than bright daylight, and will rapidly fade pigments in paintings and on paper, textiles, lacquer, and any other materials affected by normal light. Keep exposure short.

And remember that there is an ultraviolet light component in normal sunlight and in regular fluorescent lamps. Filters or curtains should be used to eliminate these rays from any areas in which delicate materials are displayed or stored.

Marianne Webb is the Museum's decorative arts conservator.

A Piggin By Any Other Name

Treen, or everyday woodenwares, such as the Scottish "luggie" were an important part of life before plastic.

Dear ROM Answers,

You were so helpful last year when I wrote in about a Davenport desk that I am writing to you again. My photos show a couple of family artifacts: a rather crude-looking wooden bowl with a handle, and an oddly shaped wooden box with a hinged cover.

The bowl is a family heirloom that has been passed down from ancestors in Scotland. I am told that it is likely an 1860s or 1870s vintage "luggie," so named for the ear-lug-like handle. It has a false bottom with a compartment below, containing something that rattles when you pick the bowl up. Family tradition says that this sort of bowl was created to serve soup or porridge to youngsters who would be amused by the rattling sound.

The glass-fronted box was purchased from an antique dealer in Campbellville, Ontario, some years ago. I do not know its origins or history, but I was informed that it is a type of ballot-box, likely used in a private club or organization such as the Masons to determine whether or not a membership applicant would be admitted. Further, I am led to believe that the voting was accomplished by each member taking a black or white ball or marble from the container that is accessible through the round hole in the back of the box. The marble was then discreetly dropped through an opening into the front section. When all the members had voted, the hinged wooden cover was dropped down to reveal an array of balls, visible through the glass front. If one or more was black, the applicant would be denied membership: thus, the origin of the term "black-balled," which is still in common use today. I would be interested to know if this tale is, in fact, true.

J. M., Toronto

PETER KAELLGREN

J. M.'s "luggie." Height (at handle): 17.4 cm (6 7/8 inches). Diameter at rim: 13 cm (5 1/4 inches).

J. M.'s ballot box. Height: 22 cm (8 3/4 inches). Base: 16.5 x 22.8 cm (6 1/2 x 9 inches).

Dear Reader,

You own two examples of collectible wooden articles known as "treen." The source of the name is fairly obvious: wood comes from trees. Before plastics came into popular use in the 1950s, inexpensive utilitarian articles and everyday utensils were often made from wood, bone, earthenware, horn, or other inexpensive natural materials. To create everyday wooden items such as bowls, dishes, chair components, mortars and pestles, salt cellars, goblets, cups, and so on, a craftsman known as a turner, would use a lathe with an iron or steel blade to shave layers from the wood.

Other articles, such as spoons, butter paddles, spatulas, snuff boxes, and pipes, were hand-carved from pieces of wood. Sometimes carved with initials or other decoration, many of these items were produced by amateur carvers as gifts for girlfriends, wives, mothers, and other family members.

Barrel makers or "coopers" produced another category of wooden wares using precisely prepared pieces of wood joined together to make containers of various sizes. This technology demanded care-

Bust of Cleopatra VII from a Black Granite Bust, Egypt, 51–30 BC

Member's Price $274.50
(Regular Price $305.00)

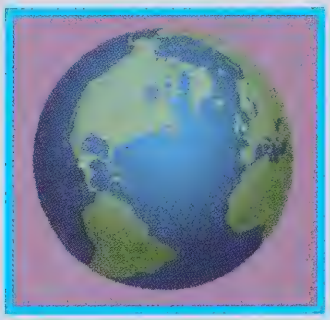
Royal Ontario Museum
(416) 586-5896
www.rom.on.ca/shops/repro

ROM Reproductions Shop

Authentic Reproductions from the ROM's own Collections

Cleopatra Queen of the Nile

Experience our World



ROM TRAVEL

416. 586. 8034
www.rom.on.ca/programs/travel

- *Quebec City and the Charlevoix Region*
- *Himalayan Kingdoms*
- *China: The Three Gorges*
- *Rome and Florence*
- *South India*
- *Galapagos and Peru*
- *Tunisia and Malta*
- *Paris*
- *The Arctic*
- *Turkey*
- *Egypt*

Organized by
The Department of Museum Volunteers
Royal Ontario Museum

Design: Sandra Lin

fully selected wood that sometimes needed special treatments such as wetting and steaming. An entire category of smaller wares—including such items as butter churns, tankards, buckets, and "luggies" like yours—was made using coopering techniques, in which wooden staves were fitted and bound together to form a receptacle.

Small containers like yours are most commonly referred to as "piggins." The form with one stave rising above the others as a handle was also popular for buckets and is still made in Japan. During the 1700s, a large version of this design was commonly used for milkmaids' pails in England. Several such buckets appear in a painting known as *Milk Maids* by English artist Francis Hayman (1708–1776), in which one of the women is shown carrying a full bucket on top of her head.

Around 1750, English potters created small stoneware and porcelain piggins, apparently as novelties. Accompanied by a tiny ladle, such a piggin was used for serving milk or cream at tea or dessert. Later, about 1800, Irish glass houses began to produce small cut-glass versions for use as salt cellars or perhaps for milk or cream. Many of these have been reproduced. The piggin form has a long

Treen at the Royal Ontario Museum

As an archaeologist, the ROM's founder, Dr. Charles Trick Currelly, was interested in articles that documented everyday life and the evolution of living standards. Treen, an excellent example of such articles, has long been collected at the Museum. Our small representative collection dates mostly from 1700 to 1875. The core collection is British, with some North German and Scandinavian carved and painted pieces; and the Canadiana collection has some wooden bowls, utensils, and maple sugar moulds.

Books on treen tend to focus on British materials. Some of these include Owen Evan-Thomas's *Domestic Utensils of Wood XVIth to XIXth Century* (London: Owen Evan-Thomas, Ltd., 1932); Edward H. Pinto's *Treen or Small Woodware Throughout the Ages* (London: B. T. Batsford, Ltd., 1949) and *Treen and Other Wooden Bygones: An Encyclopaedia and Social History* (London: G. Bell & Sons, 1969).

Interestingly, these books say very little about Mauchline Wares, a type of treen made in Ayrshire from beech or maple and decorated with decals showing engraved views of tourist spots, portraits of famous people, or occasionally tartan patterns in colour. Mauchline boxes, sewing articles, and other small items were popular souvenirs and giftwares in Britain between 1850 and 1900. An extensive collection of these wares was donated to the ROM in 1993 by Eric and Margaret Taylor. John Baker's *Mauchline Ware* (Shire Publications, 1985) illustrates a good range of examples.

The Scottish examples of treen anticipate the ROM's 12th Annual Decorative Arts Symposium to be held April 25 to 27, 2002. On the theme "Scotland and Away," scholars from Scotland and Canada will explore the Scottish contribution to the decorative arts both at home and in North America. Although treen is not one of the subjects, six talks address furniture and aspects of interior design.

For more information, contact Elsa McKay at (905) 278-9834; fax (416) 586-8075 or e-mail elsamckay@rogers.com.

930.15.9, 930.15.8, 930.15.23

BRIAN BOYLE, ROM

Left: This drinking vessel, called a "cog" (or sometimes a "bicker"), is of sycamore and walnut staves feathered together. The exterior is bound with willow. Height: 7.5 cm (3 inches). Diameter of base: 11.5 cm (4 1/2 inches). ROM Collection.

Middle: Made of bent birch with an exterior band of hickory, this "piggin," too, is Scottish, made around the 1700s. Height: 14.7 cm (5 1/2 inches). Depth: 8.7 cm (3 1/2 inches). ROM Collection.

Right: Scottish "quaich" of turned maple made in the 1700s. The bottom is mounted with a silver sixpence of Queen Elizabeth I. Height: 3.8 cm (1.5 inches). Depth: 10 cm (4 inches). ROM Collection.

Couture & COMMERCE

The Transatlantic Fashion Trade in the 1950s

by Alexandra Palmer

A fascinating book that leads us from the European capitals to New York and Toronto ... to reaffirm fashion's primordial quest for beauty.

– Valérie Guillaume, Chief Curator of Heritage at the Centre Pompidou, Paris

In a machine age, dressmaking is one of the last refuges of the human, the personal, the inimitable. In an epoch as sombre as ours, luxury must be defended inch by inch.

– Christian Dior , 1957

Dr. Alexandra Palmer is the Nora E. Vaughan Fashion Costume Curator at the Royal Ontario Museum.

Published by UBCPress in association with the Royal Ontario Museum

ROM
ROYAL ONTARIO MUSEUM

www.ubcpress.ca

Available in the ROM Shop

history and a wide usage.

Your piggin, or "luggie," with its staves of contrasting dark and light wood in natural colours bound with halves of willow branches, is a type considered to be Scottish. Because craft traditions and common forms continued unchanged over long periods of time, most treen is difficult to date precisely, but a date for your piggin of c. 1860–1875 sounds plausible. Because yours was made by a skilled cooper and is very ornamental, I suspect that it was intended as a novelty for adults, and possibly used for drinking on special occasions. Children would have used simpler, less expensive bowls.

Special forms of treen, like your "luggie," were often associated with particular locales. Perhaps the most widely recognized Scottish form is the "quaich," a turned, shallow hemispherical bowl with wide, flat ear-shaped handles to either side. A third Scottish form was the "cog," a similar low bucket, much like a wash tub, with a horizontal handle projecting at right

Nadia's
Antiques

Large selection of European Porcelain, including Dresden, Herend, Meissen, etc., Antique Clocks, Dolls, Furniture and Lighting.

Special 15% discount for ROM Members.

581 Mount Pleasant Road, Toronto, Ontario M4S 2M5

Tel: (416) 486-6621

WE ALSO BUY.

WE'D LIKE TO HEAR FROM YOU

If you own furniture, silver, glass, metalwork, ceramics, textiles, or small decorative objects that may have an interesting past and have aroused your curiosity, this column is for you. Send a clear colour photograph (or 35-mm colour slide) of the object against a simple background, providing dimensions, a description, any markings, or any known details of its history to: ROM Answers, c/o *Rotunda* magazine, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario M5S 2C6. Be sure to enclose a stamped, self-addressed envelope large enough to include any photos that must be returned to you.

Neither *Rotunda* nor the author nor any other person who may be consulted assumes any legal responsibility for these opinions or their ramifications. No financial appraisals will be offered.

Letters will be acknowledged as staff time permits.

angles from the rim at either side.

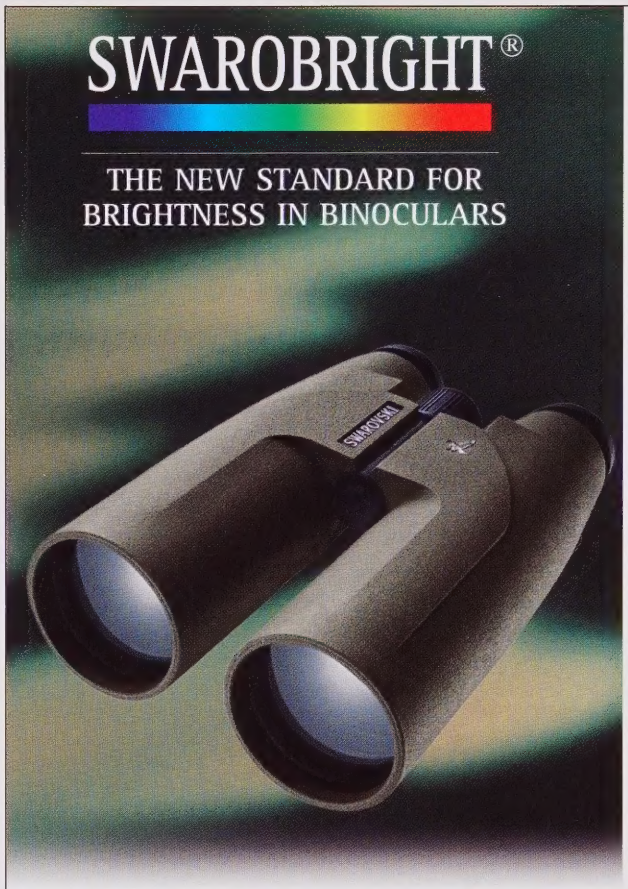
Today, it is difficult for us to imagine how important wooden articles were in previous generations. You can get some idea if you know that the term "a square meal" originated in the British navy where, during the 1600s, sailors were served food on small square slabs of wood with a raised edge. Even the roughest storm would not have damaged such wooden plates, called trenchers. This term originated from the practice of serving food on slices or *tranches* of bread during the Middle Ages, when dishes tended to be used only for serving or for communal use rather than for each individual.

As for the ballot box, your description of its use sounds logical to me. I checked *The Concise Oxford Dictionary of Current English* (Seventh Edition) in our department and it notes "black-ball: (to place in ballot box, etc., to reject candidate), . . ." Your ballot box may date from the 1800s, or perhaps the early 1900s. The oak with a dark finish suggests a date around 1900. To get a more precise date, you will have to check the finishing details on the box. Screws that are machine made (i.e., regular threads going to a point), glass that is free from any flaws, and evidence of small factory-made wire nails suggest a date around 1900. Screws that are more crudely threaded with an irregular, cut-off end, glass that is thin with small bubbles, flaws, and swirls on the surface, and wooden pegs, dove tails, or square-headed iron nails used to hold the wood together suggest a date in the early to mid 1800s. A box of this type made 1850 or earlier is perhaps more likely to be mahogany, mahogany veneer, or wood painted to look like mahogany.

Thank you for sharing your pieces with our readers, and good luck in finding a supply of white and black marbles!

PETER KAELLGREN

Peter Kaellgren is a curator in the ROM's Department of Western Art and Culture, specializing in British and European decorative arts from 1500 onward.



Like our renowned EL Binoculars, the new SLC Class of 42, 50 and 56 mm binoculars incorporate unique interference mirrors in their roof prism systems that reflect 99.5% of the available light. SWAROBRIGHT® mirror coatings deliver the highest image brightness and colour contrast available from any premium binocular at a competitive price. With SWAROBRIGHT® you will receive as much as 5% to 10% more light transmission from our new SLC Binoculars. That's more total light transmission and contrast than any other premium binocular on the planet except our EL Class! Whatever image you're looking at, from edge to edge it will be brighter, sharper and the colours more true to life than you've ever seen before. But don't take our word for it. See the New Standard for yourself!

For more information, please contact your local Swarovski authorized dealer or visit www.kindermann.ca.

SWAROVSKI OPTIK

WITH THE EYES OF A HAWK

KINDERMANN (CANADA) INC. #3-361 Steelcase Rd. W. Markham, ON L3R 3V8
Tel: 905-940-9262 Fax: 905-479-9755 Email: info@kindermann.ca

COMING IN THE FALL 2002 ISSUE

ROTUNDA

Ancient Chinese Bronzes

ROM archaeologist Chen Shen unearths a 3000-year-old mystery in Sanxingdui, western China.

Blazing a Trail in Canadian Geology

Madeleine Fritz leads the way

ROM ARCHIVES

As the first woman to receive a doctorate in geology from the University of Toronto and the second woman to be elected a Fellow of the Royal Society of Canada, Madeleine Fritz (at right) was a pioneer in the academic world. Shown here in 1954 at Coral Rapids on the Abitibi River, geological hammer in hand, the ROM geologist is accompanied by Elvira Hammell, who catalogued both specimens and books at the ROM, and John Monteith, who worked as a ROM paleontology technician for 41 years.

Dr. Fritz's specialty was bryozoan fossils. At the time this photo was taken, she was associate director of the Royal Ontario Museum of Palaeontology. In addition to collecting, she wrote for the ROM's Life Sciences Contribution series and for *Rotunda* magazine.

Julia Matthews is head of the ROM's Library and Archives.

JULIA MATTHEWS

If you remember an occasion at the ROM or an exhibition that has stayed with you across the years, send us your reminiscences at info@rom.on.ca.

Life Management Solutions

Assante

Most Companies Require a Chief Financial Officer To Handle Their Financial Needs.

Imagine having your own Personal CFO™.

Assante's Personal CFO™ is your exclusive access to a wealth of investment and financial planning resources backed by a team of specialists including:

- portfolio management experts
- estate and retirement specialists
- tax lawyers
- accountants

An Assante Personal CFO™ can help organize and simplify your financial life so that your time remains free to focus on life's other issues.

Assante – providing clients with integrated financial and life management solutions to simplify and enhance their lives.

For investors with portfolios in excess of $1,000,000, contact:

Robert Pierce, R.F.P.
Senior Vice President
Assante Asset Management Ltd.
2950 - 130 King Street West
Toronto, Ontario M5X 1A9
rpierce@assante.com

Ph: 416 304-6614 • Fx: 416 307-3325 • Toll-free: 1 888 248-9472

IT DIDN'T JUST CUT ITS TEETH AT NÜRBURGRING. IT SHARPENED THEM THERE.

THE 2003 CADILLAC CTS

When you're conceived on a track famed for its punishing corners, you don't just learn how to hold your own on the road. You learn how to bite back. The 2003 Cadillac CTS. Coming early 2002. Performance specs at gmcanada.com. Break Through.